THE MIX
NEWS, REVIEWS, INTERVIEWS, TECHNIQUES
The Music Production Magazine
Issue 74
May 00
£3.99
mag + cd

# ALESIS MASTERLINK

Have we reached the end of the line for DAT?

A cult classic reborn...

# Kurzweil K2600

Is this the ultimate pro workstation?

**EMBRACE**
Tristin Norwell on producing *Drawn From Memory*

**ON TEST**

**Compose yourself**
Behringer's new valve-driven compressor

**Nineteen series**
Signal processing on a budget

**Yamaha MSP10**
Active nearfields

**PLUS**
DJ Food
Drawmer DF320
dbx 566
Arboretum Hyperprism
Cubase Tips
Perfect monitoring set-ups

NO CD?
SEE YOUR NEWSAGENT

Future publishing
Media With Passion
MAY 2000 £3.99
9 771354 428024 05

# NOT JUST A5000

# THE 5000

Unleash the creative potential of sampling with the new Yamaha A5000. Its realtime controls take you to the heart of the sound while 126 note polyphony and six independent effect processors deliver unrivalled performance power. It's compatible with a variety of sample libraries and will even write directly to a CD writer, such as Yamaha's new CRW8424, without the need for a host computer.

At only £1,499*, the A5000 is the only 5000 worth serious consideration.

Call 01908 369269 for more.

**Tone generation method:** AWM2 • **Polyphony:** 126 notes, 32 part multi (A4000: 64 notes, 16 part) • **A/D conversion:** 20-bit 64-times oversampling • **D/A conversion:** 24-bit 8-times oversampling • **Input frequency:** 48, 44.1, 32 kHz **Output frequency:** 44.1 kHz • **Sampling frequency:** Analog input 44.1, 22.05, 11.025 kHz, 5.5125 kHz (mono and stereo), Digital input (with AIEB1 I/O expansion board) 48 kHz, 44.1 kHz, 32 kHz • **Internal sample memory capacity:** 4 MB, expandable to 128 MB • **Maximum sample length:** (32 MB mono, 64 MB stereo) • **Maximum sampling time:** (mono or stereo) 6 minutes 20 seconds (44.1 kHz) 12 minutes 40 seconds (22.05 kHz) 25 minutes 21 seconds (11.025 kHz) 50 minutes 43 seconds (5.5125 kHz) • **Effects:** 6 independent effect blocks (A4000: 3 blocks) plus individual sample EQ • **Filters:** 126 (A4000 : 64) each with 16 different types • **Included software:** Parameter editor application (Mac/PC) plus 9 sample CD-ROMs

**Also available**: A4000 (£999*) *RRP inc. VAT

YAMAHA

www.yamaha.co.uk

**The MIX ISSUE 24 – May 2000**
The Mix: Future Publishing 30 Monmouth St Bath BA1 2BW
Tel: 01225 442244 Fax: 01225 732353
Email: themix@futurenet.co.uk
Website: www.themix.net

**Editorial**
Senior Editor Chris Kempster
Deputy Editor Andrea Robinson
Deputy Art Editor Claire Watkins
Reviews Editor Oz Owen
CD Editor Adam Crute
Production Assistant Dan Monks

**Contributors: technical**
Alan Branch, Adam Crute, Trevor Curwen, Steve Evans, Adam Fuest, David Harrow, Jon Musgrave, Tim Oliver, Seb Pecchia, Sean Vincent, Jim Warboy, Ian Waugh

**Contributors: features**
Simon Aldridge, Luke Cunningham, Jon Andre Holley, Derek O'Sullivan, Simon Ounsworth, Michael Stand, Phil Strongman, Sil Wilcox, Sam Winwood

**Photography**
James Cumpsty, Gavin Roberts, Louise Broom

**Advertising**
Group Ad Manager Simon Lewis
Ad Manager Mark Sullivan
Deputy Ad Manager Roger Hall
Classified Sales Rebecca Baron

**Production**
Production Manager Glenda Skidmore
Production Co-ordinator Lee Thomas
Music Copyright Co-ordinator Gabrielle Stackpool
Ad Design Scott Caines

**Marketing**
Marketing Manager Donna Hollund
Product Manager Philippa Montgomery

**Suits**
Publisher Simon Wear
Group Publisher Simon Haisman
Publishing Director Mike Frey
Circulation Director Sue Hartley
Managing Director Jane Ingham

**Printing**
Printed by Heron Print, Heybridge, Maldon, Essex

**Licencing Enquires**
Chris Power Tel: 01225 442244

**UK and world news-stand distribution**
Future Publishing Ltd: 01225 442244

**Subscriptions/back issues**
Tel: 01458 271122
Future Publishing, FREEPOST (BS4900), Somerton, Somerset TA11 6BR

**© Future Publishing 2000**
No part of this magazine may be reproduced, stored in a retrieval system or resold without the prior written consent of the publisher. Unless otherwise specified, prices quoted on the editorial pages are recommended retail prices and include VAT. *The Mix* makes every effort to check all information, but can accept no responsibility for any errors or omissions. *The Mix* recommends that all your purchases from our advertisers are made with a credit card, so in the unlikely event of a problem, redress may be sought from the credit card company. *The Mix* recognises all copyrights contained in this issue. Where possible we acknowledge the copyright holder. All contributions are submitted and accepted on the basis of a non-exclusive worldwide license to publish or to license others to do so unless otherwise agreed in advance in writing.

**Future Publishing Ltd is part of The Future Network plc.**
The Future Network plc serves the information needs of groups of people who share a passion. We aim to satisfy their passion by creating magazines and websites that offer superb value for money, trustworthy information, multiple ways to save time and money, and are a pleasure to read or visit. This simple strategy has helped create one of the fastest-growing media companies in the world: we publish more than 100 magazines, 20 magazine websites and a number of web networks from offices in five countries. The company also licenses 42 magazines in 30 countries.
The Future Network is a public company quoted on the London Stock Exchange (symbol: FNET).

**Chairman** Chris Anderson
**Chief Executive** Greg Ingham

Tel +44 1225 442244
www.thefuturenetwork.plc.uk

Bath London Milan Munich New York Paris San Francisco

THE future NETWORK | future PUBLISHING

Media with passion

# Reverse technology

Founder of the influential and enchanting Cocteau Twins, Robin Guthrie has moved into production with acts like Lush, Definition of Sound and AR Kane

I am very interested in speaking with people who, like me, create music in a vacuum – that is to say, solitary performers, writers, arrangers, engineers, producers, control freaks... We all have a bit of that in us, and that becomes obvious to me when two or more people sit around a computer with a music program on it. There has never been a better time to be making music, sure, but the average musician now has to be part engineer, or at least be willing to get his hands dirty on a computer keyboard of some sort.

In order to successfully transfer your musical ideas into reality, you have to make the process of engineering and programming as transparent as possible. For example, how many times have you scratched your head thinking "why can't I hear it" or "how the **** do I do that" only to then realise that you have lost the plot musically. It is so important to know your system so that operating it becomes intuitive. Your system should be tailored to your needs so that when you power up in the morning it all works and you don't have to go through lots of set-up screens and the like, you just power up and go to work.

And yet I find so many people who really struggle with this, and even though they have invested a lot of money in the best equipment they could find, they have omitted to invest the time in reading the manual. It is common sense: R.T.F.M.

It is very encouraging to see that audio software recording systems have slowly but surely come of age. I have pretty much been converted to hard-disk recording over the last couple of years and I don't see a way back at the moment. My attic is filled with digital debris, in today's terms worthless and useless. Yesteryear, each promised a vision of the future, a new way to work, but the early digital systems had so many limitations that the music that was created with them seemed to happen in spite of the technology and not because of it. And yet we all persevered, trying to make this talk to that, this sync with that, because we loved the technology of it all, the 'wow!' factor.

But now it all seems to work properly. We are no longer limited to low bandwidth, short sampling time, real-time, crunchy A-D/D-A converters and the like. Rather, we seem to have an abundance of high-quality affordable systems available (albeit often complex and with a steep learning curve) each capable of more tracks of higher fidelity recording than has ever been available.

So where is the challenge with the technology? Well, maybe it is in having physical modelling of classic mics, amps, and so on. Or software simulations of classic synths.

Hmm, sounds a little funny, doesn't it? How long before someone makes an 8-bit digital recording system simulated in software with authentic fizzy A-Ds and realistic glitches?

**Robin Guthrie**

about THE MiX

THE MiX is the essential accessory for the recording studio. Our equipment reviews, written by working producers and engineers, give you an impartial opinion of the latest studio and recording gear, and our interviews get to the heart of the current techniques and issues in the recording industry.

THE MiX cover-mounted CD helps you produce better music, by providing a varied monthly selection of collectable studio-quality samples provided by some of the top pro's in the business, demos of the latest software and hardware, and audio tutorials demonstrating contemporary recording techniques.

# contents

## reviews


**28 Kurzweil K2600**
An update to the cult classic K2500, Kurzweil's latest workstation is a performer's dream come true. *Sean Vincent* has a play

**35 Arboretum Hyperprism 2.5**
*Jim Warboy* tests the latest additions to the creative software FX bundle with the slightly whacky approach

**38 Yamaha MSP10 and SW10**
*Tim Oliver* lends an ear to Yamaha's new active nearfields and sub-woofer

**42 Drawmer DF320**
*Trevor Curwen* rediscovers the joys of this classic single-ended noise reduction unit (as well as that pair of comfortable slippers he lost)

**44 Behringer Tube Composer**
*Adam Fuest* gets to grips with the eagerly-awaited retro-looking valve compressor/gate/limiter

**46 Nineteen series**
Good looking or what? *Seb Pecchia* tests a multi-FX unit, enhancer and compressor – the first offerings from a brand-new range of budget processors

**54 dbx 566**
A classy-looking tube compressor and versatile studio workhorse – *Trevor Curwen* tests the latest addition to the dbx family

**58 Alesis Masterlink**
*Alan Branch* finds out if this versatile mastering recorder is the final nail in DAT's coffin

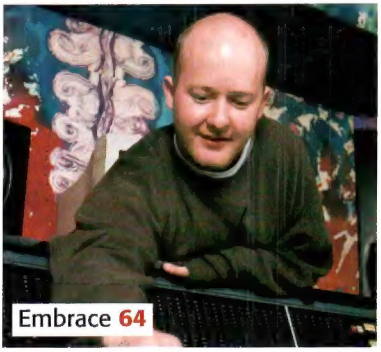

## sound advice


**82 Perfect Monitor Placement**
In the final instalment of our series, *Chris Kempster* moves into larger control rooms and tackles the subjects of standing waves and room acoustics

**89 Cubase Tips**
Make your life easier by knowing your Tools inside out. *Adam Crute* shows you the way

**92 Help File**
Problems in the studio? Our team of experts turn audio agony aunts to solve your technical problems

Behringer Tube Composer **44**


Embrace **64**

Yamaha MSP10 **38**

Kurzweil K2600 28

Alesis Masterlink 58

## features


### 64 Embrace
After turning away over 30 producers, double platinum-selling rockers Embrace chose Tristin Norwell to man the controls for their second album. *Phil Strongman* finds out why

### 70 DJ Food
Carrying on the fine sampling traditions that went before them, minimalism fiends PC and Strictly Kev talk production with *Derek O'Sullivan*


## regulars


### 8 News
If it's new and it's music production, it's here. All the new gear and industry gossip from a month in the 'biz

### 24 Open Mic
Have your say on all the burning music production issues of the day

### 62 Album Reviews
Our verdicts on the biggest and best new albums released this month

### 76 Toolbox
All the latest news, advice, tips, and software for Mac and PC users

### 88 Subscribe to The Mix
Have the UK's No. 1 Music Production Magazine delivered straight to your door

### 96 A&R Dept
Send your demos to be rated or slated by our panel of industry experts – if you dare

### 98 Contacts
The indispensable guide to the manufacturers and distributors of all your favourite studio kit

### 102 Readers' Ads
In the market for used gear? Check out our free ads for second-hand bargains galore

DJ Food 70

# cd contents

## software

track 1

### PC

**Arboretum Hyperprism 1.5.5**
Demo of the real-time multi-effects processor, the predecessor to version 2.5 (reviewed on page 35).

**Emagic Logic Audio** p.15
Upgrades from:
Platinum 4.1.1 - 4.1.4
Gold 4.1.1 - 4.1.4
Silver 4.1.1 - 4.1.4
Micrologic AV 4.0.4 - 4.1.1

**Sonic Foundry Acid Pro 2** p.76
Try out the demo version of this fun-to-use sample looping software.

**Button Production Beat Creator** p. 22
Get slicing and dicing with this demo of the new groove creating and editing program.

### MAC

**Arboretum Hyperprism 2.1**
Demo of the real-time multi-effects processor, the predecessor to version 2.5 (reviewed on page 35).

**Emagic Logic Audio** p.15
Why bother downloading when you can get all your upgrades right here, from:
Platinum 4.1.2 to 4.1.5
Gold 4.1.2 to 4.1.4
Silver 4.1.2 to 4.1.4
Micrologic AV 4.1.2 to 4.1.3

**Vsamp** p.79
Turn your Mac into a 16-part multi-timbral sampler with this $25 shareware program.

## demo of the month

track 2

**Amorphous 'Onictha'** p.96
Bigbeat meets electronica in this wild melting pot of frantic funkiness. You'd better take cover...

## gear demos

tracks 3-4

**Kurzweil K2600** p. 28

track 3
The keyboard kings show off their latest baby in action on these two factory demos. The first shows off those renowned piano sounds, while the second is a full-on pop track.

track 4
We take a little test drive through some of the famous Kurzweil sounds:
i. Overdrive organ
ii. Moog bass
iii. Alazam take2
iv. Highlandtastic
v. Elephantias
vi. OB pad/brass
vii. Rezonant snob
viii. Notch stinker
ix. Luscious
x. Hello

track 5

**Arboretum Hyperprism** p.35
Tried and tested: version 2.5 of this software effects processor...
i. Drum loop dry
ii. Drum loop using Granulator
iii. Drum loop using Granulator into room reverb
iv. Drum loop with dynamic changes applied to the reverb mix and brightness
v. Juno pad dry
vi. Juno pad with HyperPhaser
vii. Juno pad with HyperPhaser into large hall reverb
viii. Darth Vader vocal dry
ix. Darth Vader vocal processed with Formant Pitch Shifter
x. Mickey vocal dry
xi. Mickey vocal processed with Formant Pitch Shifter (Munchkin preset)
xii. Trance Sequence dry
xiii. Trance Sequence with HyperPhaser
xiv. Trance Sequence with HyperPhaser into changing delay feedback

track 6

**Drawmer DF320** p.42
Drawmer's single-ended noise reduction unit tidies up the sound of a noisy vintage organ, and cuts the crap at the start of a dance tune.

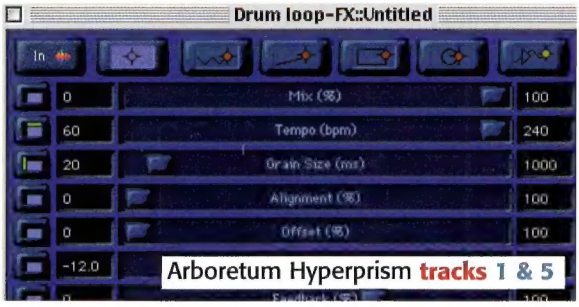
track 7

**Nineteen series** p.46
We put the compressor, multi-FX and enhancer from the new series of budget processors through their paces.

track 8

**dbx 566** p.54
Hear the dbx 566 valve compressor work its charms on a piano, then get pressed into service as a DI box for electric guitar.

Drawmer DF320 **track 6**




Arboretum Hyperprism **tracks 1 & 5**

## samples

**tracks 9-14**

### Coldcut: Choice Cuts

Killer sounds and loops from the Coldcut sample library, hand-picked for *The Mix* readers by Jon More. Samples are in WAV and AIFF format on track 1.

**track 9**

i. AA1 Scratch
ii. AF1 Break A
iii. BSD 1p1
iv. BSD 1pt
v. Chicken Electro Perc

**track 10**

i. Col Swoop 1D
ii. Cowbell 1
iii. Dark Lady Singing
iv. Echos
v. FX D1

**track 11**

i. FX D3
ii. FX D4
iii. FX DL
iv. FX DR1
v. FX DRL3

**track 12**

i. FX DRL5
ii. Guitar 4
iii. Guitar 6
iv. Guitar 7
v. Guitar G1

**track 13**

i. Heavy Kit 04
ii. Heavy Kit 05
iii. Heavy Kit 13
iv. Ndigenous Noise Break
v. Noize 08

**track 14**

i. Odd Funk Stretch Break
ii. Tweak Bleep Sn/perc
iii. Vox Noise
iv. Weird Hat 01
v. Weird Hat 02
vi. Wiggy Wah Filter Perc

## This month's Sound Factory samplist

**Jonathan More**

As one half of electronic pioneers and sampling trailblazers Coldcut, Jonathan More was behind some of the most influential tracks on the burgeoning scene and helped launch the careers of Yazz ('The Only Way Is Up') and Lisa Stansfield ('People Hold On'). Along with Coldcut partner Matt Black, he formed the DJ Food collective in the early '90s, carrying on the sampling tradition by offering DJs and producers breaks, loops and samples ideal for mixing and remixing. Commitments to Coldcut and their own record label Ninja Tune preclude Jon from taking part in DJ Food collaborations these days, so, as he told *The Mix*: "Coldcut are happy to hand on the flame of funk to PC and Strictly – inheritors of the cloak of Food" (read more about DJ Food in our feature starting on p.70).

This *Choice Cuts* collection of samples has been selected by Jon from the Coldcut library, especially for *The Mix* readers.

## Netscape Online: the free internet service in association with Future Publishing

**track 1**

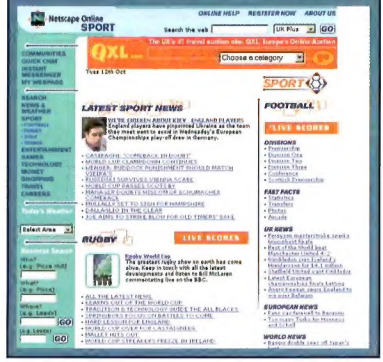
Sign up for the new FREE Netscape Online Service, sponsored by Future Publishing and featuring content from Future Publishing's web sites.

Netscape Online brings you all your internet needs – browse the web easily with Netscape Navigator, organise your email with Netscape Messenger, and create great web pages with Netscape Composer – and all for free!

With one easy click, Netscape Online gives you...

- Search engine facilities to find whatever you need on the web
- Up-to-the-minute news and weather for home and abroad
- Coverage of and links to all your favourite sports
- Comprehensive financial information
- Games for all your favourite formats, from Mac to Dreamcast

Make Netscape Online part of your daily routine. Load it up from *The Mix* CD now.



# news

If it's new and it's music production, it's here. All the gear, gossip and goings-on from a month in the biz...

NAMM Report

## Yamaha get bits by the teeth

The AW4416 promises mixing power of 02R proportions, combined with 16 tracks of hard-disk recording

Probably the most excitement caused by a recording product this year has been Yamaha's AW4416, which promises the kind of mixing power seen on the now-legendary 02R digital desk, combined with 16-track hard-disk recording.

First unveiled at NAMM in January, the AW features 24-bit uncompressed recording with 32-bit processing, all in a compact package that is reminiscent of Yamaha's recent digital mixers. The price is expected to be £2,199, which makes it more expensive than most other current 16-track recorder/mixers, but the wealth of features and power it packs in more than justifies this pricetag.

With digital, analogue, MIDI and wordclock ins and outs, this is one versatile set-up

**Features: AW4416**

- 16-track recording (x 8 virtual tracks)
- 24-bit recording, 32-bit processing
- Up to 64Gb internal hard disk
- 44 channels (max), 8 groups, 8 aux sends
- 2 multi-FX
- 320 x 240 dot LCD screen
- Built-in CD/RW drive (optional)

**More from: Yamaha-Kemble**
**Tel: 01908 366700**
**Web: www.yamaha.co.uk**

More NAMM news on page 9-10

NAMM Report

## Control to sequencists

The idea of a front-end for VST or Logic, combining MIDI control with audio I/O is an obvious one, but one that hasn't exactly been seized upon by the industry – until now! Tascam's new US-428 offers a tactile mixing surface for controlling mixing and recording functions of your favourite sequencer, and hooks up to your computer via a single USB connection. There's audio processing too: four analogue input channels plus two S/PDIF inputs mean you can mix and EQ via the 4-band parametric EQ, and output via the analogue (RCA) or digital (S/PDIF) outputs. You can record four channels simultaneously, and the unit's converters are all 24-bit.

Mix it up with your favourite sequencer

**Price: TBC (available May/June)**
**More from: Teac UK**
**Tel: 01923 819630**
**Web: www.teac.co.uk**

NAMM Report

## Sony's baby Oxford

You'll no doubt remember the mega-expensive Sony Oxford that was featured in *The Mix* issue 47. Now it seems Sony have taken some of the technology from the Oxford and packed it into a relatively affordable compact recording desk.

The DMX-R100 is a 48-channel digital console, featuring 25 motorized faders, a touch-screen display, 24-bit audio quality, and a wealth of I/O options available as separate boards. Ease of use has been stressed by Sony at the recent NAMM and AES shows, and this can be seen in the design: the very clean mixing surface centres on a panel of EQ and assign buttons; above that is the superb colour SVGA touchscreen.

All the mixing functions of the DMX can be displayed here, from an overview of channel settings to individual dynamics curves and equalization. The desk is also ready for surround sound duties too, with panning and processing complemented by six outputs for control room monitoring.

**Price: £14,980**
**More from: Sony UK**
**Tel: 01932 816000**
**Web: www.sony.uk**

# And the winner is...

Congratulations to Kipper, who we featured in issue 71 of *The Mix*. His production skills were highlighted and rewarded by virtue of Sting's *Brand New Day* album picking up two Grammys for Best Pop Album and Best Male Pop Vocal. Kipper was unavailable for comment as we went to press, but sources say he was probably out celebrating with Sting in his local...

Kipper: producer of this year's "Best Pop Album", American stylee

## in brief

### Freaky profiles

Pre-programmed profiles are now available from Kenton Electronics for their Control Freak Studio Edition and original MIDI controllers for Cubase VST, providing control over, amongst other things, volume, pan and mutes on the VST audio mixer. They come pre-loaded into all new Control Freak units, or can be downloaded from the Kenton website (www.kenton.co.uk).

**More from: Kenton Electronics**
**Tel: 0208 544 9200**

### Rack it up

The new RMS-3 rack unit is a useful accessory for fitting non-rackmounting equipment into a 19" rack. Priced at £27, the kit comprises a pair of 3U rackmounting wings, with a central vertical slot and rear horizontal slot allowing two adjustable L-shaped bars to hold your equipment (up to 25 kilos) in place.

**More from: MTR Ltd**
**Tel: 01923 234050**

### Computer Music

In this month's *Computer Music*, catch the world exclusive preview of Propellerheads' incredible new software, Reason, as well as an interview with the Props themselves. But the fun doesn't end there as the latest issue is also their SoundFont special, with tons of advice on using this popular format as well as £30 worth of the blighters on the coverdisc. Need some drum loops? Well, we've got 150 of them on the CD, put together specially for CM by none other than DJ Rap's drummer, Mark Roberts. Crikey!

## Area 51 initiates PC sort-out

With so many combinations of different PCs, soundcards and software that can be put together for making music, compatibility problems can often arise, especially when using the same computer for multiple applications (office, games, graphics).

These problems can be resolved with correct information and know-how, and with this in mind, Area 51 UK have held a Think-Tank with many of the manufacturers and distributors in the 'computer music' industry (including Emagic and Steinberg among others).

The Think-Tanks are forums to discuss improving customer service and technical support, and will take place two to three times a year.

**More from: Area 51**
**For comments or ideas about customer service, email: solutions@area51uk.com**

## I ♥ my shop

It may be a local shop for local people (we'll have no trouble here), but here's your chance to give your favourite music shop a vote of confidence. The MIA (Music Industry Association) are taking nominations for their annual awards, and they want your votes. Categories are: Best Overall Retailer (Wales and North), Best Overall Retailer (South), Best Printed Music Retailer, Most Helpful Staff/Best Customer Service and Best Retail Sales Person. Post your votes to MIA Awards, The Mix, 30 Monmouth St, Bath BA1 2BW to arrive by 7 May, and as an added bonus, we'll enter you into our special draw to win a night out with the Senior Editor (second prize: two nights).

## The name game

If you were confused by our story last issue about the use of the legendary Trident name ('Trident Missiles Launched'), let us enlighten you. John Oram currently markets products under the name Trident Audio Ltd (which he owns), while Malcolm Toft owns the name Trident Audio Developments Ltd, but is now marketing products under the name Trident-MTA. Trident Audio Ltd and Trident Audio Developments Ltd are two separate, unrelated companies. So now you know!

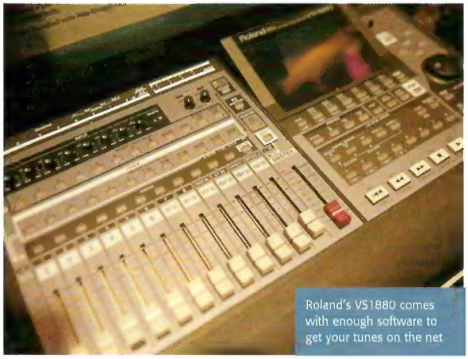
NAMM Report

# Flock of multitrackers

There's been much activity in the compact recorder/mixer market of late, what with Yamaha launching their '02R with a recorder' box (see AW4416 story, page 8) and new models from the likes of Fostex, Roland and Akai. Fostex's VF-16 is the smallest (and brightest) of the new crop, and features 16 tracks of uncompressed audio, two built-in effects, 16 inputs, 3-band EQ, and assignable channel compressors and master compressor.

For those of you who like Akai's DPS-12, then you'll love their new DPS-16, which features a bigger screen, 48/96 recording, and 10-track simultaneous recording. The DPS-12 now has new editing software for Mac and PC that makes editing and mixing even easier. It includes an EB4M FX board and 10Gb internal drive as standard.

The space-saving Fostex, with two rows of faders


Roland's VS1880 comes with enough software to get your tunes on the net

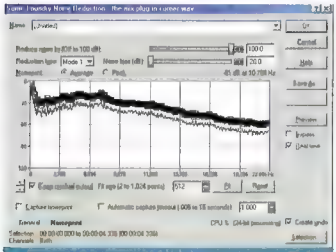
Finally, we have the VS1880 from Roland, which adds even more features to the VS1680, which it supercedes. As well as the extra two tracks it provides, there's also improved CD mastering facilities, and the unit comes complete with Emagic Logic VS software and Liquifier Pro, which enables you to put your music straight onto the net.

**Prices: VF-16 £1,099; VS1880 £2,199; DPS-16, £1,699**
**More from: SCV (Fostex): 0171 923 1892**
**Roland: 01792 515020**
**Akai: 0208 614 2592**

# Plug-in corner

## Our new monthly round-up of the latest and greatest plug-ins

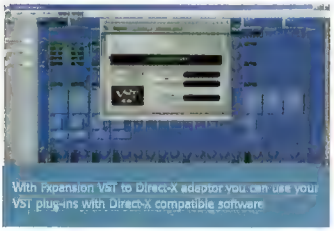
First off this month we have the new Version 2 of Sonic Foundry's DirectX Noise Reduction plug-in. Based on the original version, this update includes a new clipped peak restoration plug-in, as well as enhancing the original features like broadband noise reduction and pop, click and crackle removal. This is the ideal package for anyone into vinyl restoration or cleaning up old tapes. The ability to 'capture' the 'noiseprint' and then analyse and remove it is exceptional. You can easily remove mains hum, tape hiss and background



Sonic Foundry's Direct X Noise Reduction V2 has a new clipped peak restoration plug-in and enhanced features

noise with a little effort. For those of you not afraid to get creative, you can even create some awesome effects by abusing some of the parameters. Try putting a drum loop through it and increasing the noise bias while reducing the overall noise – it's a cool effect. It's priced at £275, and as ever with Sonic Foundry, the manual is excellent and will guide you through the procedures you need to achieve the best results. Contact SCV on 0171 923 1892 or check out the website: www.scvlondon.co.uk

New out this month are some excellent plug-ins from Fxpansion. Sold as a package and only available online, these plug-ins offer great value for money. Phat-sync is a MIDI-controlled filter that utilises MIDI clock information to synchronise custom filter settings with the bpm of your tune. Giving you control over resonance and cut-off frequency over 16 steps, Phat-sync then lets you put these 'sequences' into a matrix of up to four sequences of one bar each. You can then use the matrix to select the order of these sequences to fit with your music. There are controls for 'base resonance and cut-off' as well as a swing function and 'glide' (to adjust the transitions between steps). Phat-sync works best with VST, as the MIDI side of things is dealt with for you, but it is possible to use it with some other packages by using a loopback device. This is a great product, but beware of latency problems if your soundcard's not got a great spec.



With Fxpansion VST to Direct-X adaptor you can use your VST plug-ins with Direct-X compatible software

Another interesting product from Fxpansion is the VST to DirectX adaptor. You guessed it... it's an adaptor plug-in for using VST plug-ins with DirectX-compatible software. The most popular use for this would probably be to run VST instruments, but again watch out for latency if you've not got a great soundcard.

Also from Fxpansion comes Ring Modulator. This is basically the guts of an analogue synth without the raw tone generator. You supply the input, then mess with the controls until you get something interesting out of the other end. Like many of the synths of old, this package can create some great sounds but like most things in life, you get more out when you put more in. This is another plug-in that excels at being abused. Shove beats and vocals through it, really go to town with the processing and you'll get some top results. Like Phat-sync, Ring Modulator can also be controlled via MIDI. This makes it much easier to use and much more 'immediate'. Again, this is well worth checking out, along with their MIDI Comb, Auto Pole and Robotik Vocoder. These come as a package and retail online for a very reasonable $100 (about £60). Visit the website: www.fxpansion.com and follow the links to the downloads.

Another hot product due out soon is the EXS24 Xtreme Sampler plug-in for the Logic series. This is a 32-voice sampler that can run up to 16 sampler plug-ins simultaneously with audio files up to 24bit 96kHz. It features full automation, can use Logic's effects, has a filter section based on Logic's ES-1 synth and supports Akai sample format using Logic's built-in sample editor. With full key-mapping, velocity zoning and zero latency (due to playback from RAM), this could be a big ol' nail in the coffin for hardware samplers. The price is yet to be confirmed, but UK RRP is expected to be around £279. Wow! More from Sound Technology (Tel: 01462 480000).

Steinberg have just announced a new compilation of drum sounds from 'BitBeats' for their LM-4 virtual drum machine. Called the XXL compilation (£39), it covers natural dry stereo samples, atmospheric 'processed' samples and electronic samples. The processed samples feature reverb recorded from real rooms rather than electronically-generated reverb and all the sets feature pre-programmed panning and volume parameters for quick customization. With 36 high-quality

Supply an input signal, then mess with the controls until you get something interesting out of the other end

sound sets to chose from and eight velocity layers for each sound, this sounds like a serious addition to an already awesome package. More from Arbiter (Tel: 0208 970 1909) or www.steinberguk.com.

Waves (www.waves.com) have just announced the Pro-FX Plus suite of audio processors for Digidesign TDM, Audiosuite, and Digi 001(RTAS) digital audio systems, plus other Mac and Windows native platforms. The new bundle includes Doppler and Enigma processors as well as the usual Pro-FX processors. The new package costs $850 for the TDM version and is available as an upgrade to existing users.

Until next month, keep on pluggin'...

Phat-sync: a MIDI-controlled filter that uses MIDI clock info to sync custom filter settings with your bpm

# 'Two tribes' become three

## New Electribe rhythm production sampler joins the Korg family

Electribe S- for fat and gritty sounds, look no further...

Following hot on the heels of the Electribe A and Electribe R, Korg have announced the Electribe S, a rhythm production sampler. Apparently endowed with a "sound as fat and gritty as you'll get", the S is equipped with 16 pad keys to program rhythm patterns, and tweakable knobs allowing a hands-on approach for aggressive processing of samples with effects and filtering. Effects can also be added to a previously recorded sample and the result can be resampled to create new sounds.

With a maximum sampling time of 95 seconds in mono, the S has capacity for 100 samples in mono (50 in stereo). Complex patterns can be created from a single loop or phrase using the ReCut! Function, which detects the attacks of each part within a loop and allows each part to be tweaked separately.

Sampled sounds can be arranged into rhythm patterns using a step sequencer, with rolls or reverse playback added at the push of a button. Every knob tweak can also be recorded as part of a rhythm pattern. Internal capacity is 128 different patterns, and up to 256 patterns/steps can be combined to create a song, of which 16 can be stored onboard.

**Price:** TBC
**More from:** Korg
**Tel:** 01908 857100
**Web:** www.korg.co.uk

# Creative launches range of digital audio players

Ooh, check out these cool customers. Who could possibly be behind such slick and stylish gizmos? You'd be forgiven for not spotting one of the more usual corporate badges here, but it's actually down to Creative Labs, the team behind the ubiquitous SoundBlaster range of soundcards. And what you see here are not portable CD players – that's not news – they are, in fact, Digital Audio Players.

There are two models available – the Creative Digital Audio Player II MG (and yes, we know that rolls of the tongue easily, but let's abbreviate it to CDAPIIMG anyway) and the Creative Digital Audio Player Jukebox (CDAPJ). The CDAPIIMG is wrapped in a magnesium case and comes with 64Mb flash memory, upgradeable to a chunky 128Mb, and comes with a SmartMedia slot providing hours of audio storage. It supports MP3 and WMA, and has been future-proofed by ensuring Codecs can be upgraded.

If that doesn't get you going, try the CDAPJ – a portable jukebox in every sense of the word. It's 6Gb(!) drive can hold up to 150 CD albums – and not as MP3s, but at CD quality – and up to 2,600 hours of spoken word at a lower resolution. And what else can you do with all that storage available? Why, use it to back-up as much as 6Gb of data from your computer and er... wander around with it, of course!

**Prices:** TBA
**More from:** Creative Labs
**Tel:** 0118 934 4322
**Web:** www.europe.creative.com

cut here

**This drum machine contains a whole range of drum sounds, and various functions to let you manipulate them. Use it to create complex loops and patterns, or just play around and watch the lights flicker.**

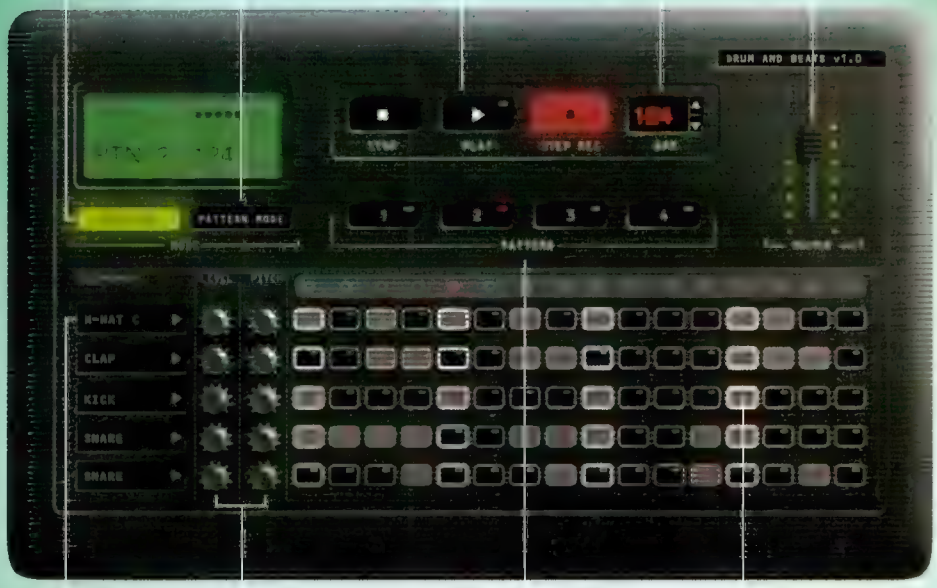
**Song mode**
Plays through the four beats stored in the pattern banks one after another in a continuous loop.

**Stop/Play/Step Rec buttons**
Stop, play or put the drum machine into record mode.

**Pattern mode**
In this mode the drum machine loops through the pattern selected in the pattern bank.

**BPM**
Sets the tempo of the drum pattern in beats per minute, from slow and mellow to drum 'n' bass.

**Master volume fader**
Move this up and down, plug in your speakers and hear the results.




**Instrument select button**
Select the drum sounds with this button.

**Drum beat switches**
These switches activate the different drum sounds you have selected. Each separate switch represents a subdivision of the rhythm, with four subdivisions per beat.

**Level/Pitch controls**
Adjust the individual volume and pitch of each drum sound with these dials.

**Pattern bank**
Save up to four drum beats in the four pattern banks. Click on play and then on the different pattern bank buttons to switch between beats, or switch to song mode to play each stored drum beat one after the other. If this sounds complicated that's because it is. This tool is industry standard.

# *Drums and rhythm: Create the backbone of your music online.*

This is just one of the tools BT gives you at getoutthere.bt.com, a site dedicated to helping unsigned musicians fulfil their potential. Keep this guide and you can use it when you get to the site.

getoutthere.bt.com BT

# Why use Digital Performer's effects automation?

MOTU

Upgrade to Digital Performer for only £199.00 if you own... Cubase • Logic • Vegas • Live • Pro Tools • Notator/Creator Cool Edit Pro • BIAS Peak CakeWalk Call for details

1. **Beat/tempo-based automation**
   Automate plug-in effects in perfect time with your music, from filter sweeps that land on downbeats to multitap delays that echo in triplet 8ths. Your beat-based effects always stay in rhythm, even through meter and tempo changes. You'll never waste time wondering things like, "how many milliseconds is a 16th note at this tempo anyway?" Rhythmic effects are now just a few licks away.

2. **Sample-accurate ramp automation**
   Digital Performer's plug-in automation isn't a kludge — it calculates true ramps in 32-bit floating point glory. And it's sample-accurate, not quantized to buffer boundaries, so you'll never hear weird artifacts or zipper noise in your mixes. In fact, your moves will be as smooth as silk.

3. **Discrete events and stair-step automation**
   Some effect changes are discrete events, like changing an LFO from a sine wave to a square wave. Others require a stair-step approach. Digital Performer can automate ramps, events and steps.

4. **Graphic editing**
   View all automation data directly on the audio waveform. Work fast with click-and-move tools and convenient control points.

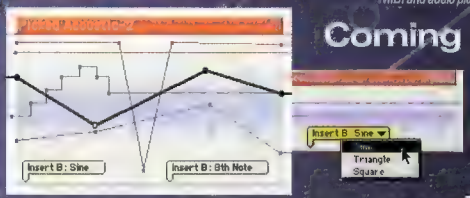
5. **View all automation data at one time**
   Clearly view all automation data at one time. Easily control the interaction of multiple FX parameters.

6. **Units of measurement that actually make sense**
   Digital Performer's automation data is always displayed in the correct unit (like milliseconds or percent), instead of arbitrary numeric ranges like other programs (0-127, yeah!).

7. **Five advanced automation modes**
   Tweak your heart out with advanced automation modes like Touch, Latch, Overwrite, Trim Touch and Trim Latch. Want to tweak the effect? You can automate that too.

8. **Mackie® HUI™ support**
   Tweak FX parameters in real time with real knobs. Record your moves. Feel the power.

*Digital Performer includes more than 50 automatable MIDI and audio plug-in effects.*




Coming soon in Digital Performer

musictrack

2 THE GRANARY BUILDINGS • MILLOW • NR DUNTON • BEDFORDSHIRE • SG18 8RH • TEL: 01767 313447 • FAX: 01767 313557 • www.musictrack.co.uk

All trademarks are property of their respective holders.

# Mindprint valve compressor

Mindprint, manufacturers of the En-Voice preamp, have a new stereo compressor. Using valve circuitry, the T-Comp is designed to add a bit of analogue warmth to digital recordings. It can be used as two single channels or linked for stereo, and employs soft-knee operation for gentler compression as the signal rises toward the threshold. A sidechain filter can be switched in to make the compressor react less aggressively to bass-heavy signals, and in addition to standard attack and release controls, there is an Adaptive Mode for automatic program-dependent control. A digital input and output, the 24-bit DI-mod, can be added to the unit, supporting both 48kHz and 44.1kHz rates.

**Price:** £449
**More from:** Korg
**Tel:** 01908 857100
**Web:** www.korg.co.uk

# More Logic upgrades

Emagic's Logic Audio is now up to version 4.1.4 and 4.1.5 (for the Platinum Mac version) with some bug fixes for both PC and Mac. You can get the upgrades free from the Emagic website, or save yourself a phone call and get it from this month's cover CD.

# Ultramaximise your mix

Following the success of their Ultramaximiser plug-in, Waves have released a hardware version. L2 Ultramaximiser is a 2U rackmount combining a peak limiter with A-D and D-A converters. Capable of dual mono and stereo, the Ultramaximiser features a brick wall look-ahead peak limiter that eliminates the danger of clipping when sending hot signals to the next piece of gear in the chain.

Waves software is at the heart of the unit in the shape of IDR dithering technology, and ARC technology, which continuously controls the optimum release time for maximising levels and minimising audible distortions. With 48-bit internal processing and support for 96kHz sampling rates, the unit can perform re-quantization to 24, 22, 20, 18 and 16-bit outputs. Waves claim that the L2 can enhance the perceived sound quality by as much as 24dB, giving 16 and 20-bit masters the perceived resolution of 20 and 24-bit signals.

**Price:** £1,821
**More From:** SCV
**Tel:** 0171 923 1892
**Web:** www.scvlondon.co.uk

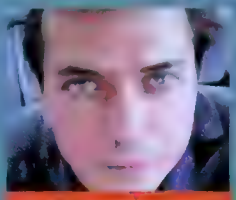
Ultramaximiser: Eliminate those dangerous clipping problems with Waves' new L2

# recording in progress

Ocean Colour Scene are at Metropolis mixing their new album with Max Hayes.

Damage are currently recording vocals with Tony Matthews at Brittania Row.

Pete Antipodean Kylie Minogue is at Windmill Lane in Dublin mixing new tracks.


James Sanger is in the swim of th

Britannia Row are currently playing host to girl band Hepburn, who are recording their new album with Michael Mocito at the controls.

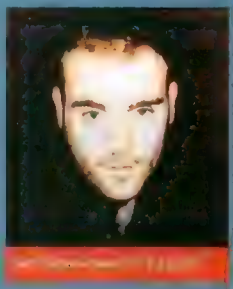
James Sanger is enjoying the continental lifestyle at Mike Chateau De La Rouge working on tracks with Headsm for their third album.

Texas are curr tly mixing tracks at Whitfield studios with Ash Howes.

Ex-Siouxsie and the Banshees bassist Steven Severin is self producing his new album at Wolf Studios in London, to be released on his own RE: imprint.

Teenage Fanclub are mixing their forthcoming album in South Wales' Rockfield studios.

Steve Power and Guy Chambers producing new tracks with tar Robt



Pro Tools aficionado and French synth whizz Jean-Michel Jarre is currently mixing tracks at Eden. Producer Dave Bascombe is behind the desk.

Major-league DJ Seb Fontaine is at Berwick St Studios compiling the latest in the *Prototype* mix collection. C with Paul Morris producing.

# in brief

### Soundscape hit the road

Soundscape will be demoing their Mixtreme 2000 PowerPak and R•Ed systems at roadshows around the country in April. All shows start at 7pm and will be taking in Glasgow (4th), Edinburgh (5th), Newcastle (6th), Manchester (18th), Birmingham (19th) and London (26th).

**More from: Soundscape**
**Tel: 02920 540333**

### Save your ears

Wedges not your thing? Check out Sensorcom's new in-ear Micro-Monitors. Fashioned from ultra-soft platinum-cured silicon, these ear-drivers come as one-size-fits-all but can be custom-fitted, providing low-level in-ear monitoring.

**More from: Sensorcom**
**Tel: 0181 650 0880**
**Web: www.sensorcom.com**

### Patching patter

For a guaranteed 'dust proof' patch system, look no further than the new Deltron SwiftPatch. It's a 19" rack panel with interlocking sealed jack modules (allowing up to 24 channels in one unit) each with four back-to-back 3-pole 1/4" sockets for stereo or mono signal patching.

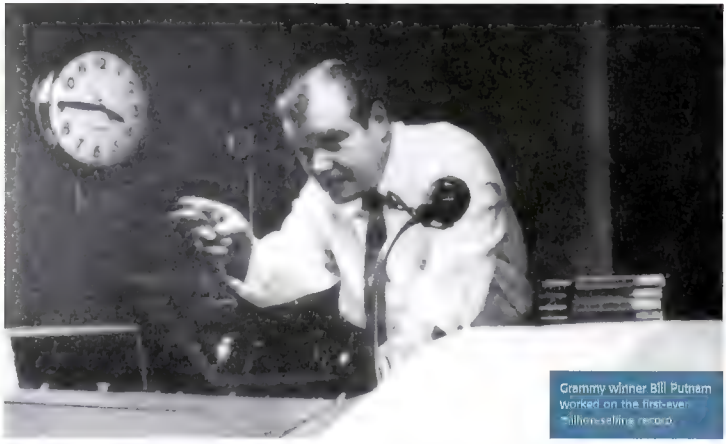
**More from: Deltron**
**Tel: 0181 965 4222**

### Future Music

Don't miss the April issue of *Future Music*. Not only has it got the world's first review of the Korg MS2000 analogue synth, but there's a remix competition that could win you an £850 sampler and a record deal. A must-have for any bedroom muso.

# Grammy for Putnam

## 1176 and LA2A designer wins tech award



Grammy winner Bill Putnam worked on the first-ever million-selling record.

Legendary American engineer and studio designer M.T. 'Bill' Putnam has been honoured with a technical Grammy in recognition of his work and technical contribution to the recording industry. The late Putnam joins an illustrious group of recipients including Rupert Neve, Ray Dolby, George Massenburg, and Georg Neumann.

During his recording career Putnam worked with artists such as Dizzy Gillespie, Frank Sinatra, and Ella Fitzgerald, lending his touch to many classic recordings including Ray Charles' 'Can't Stop Loving You' and the first million-selling record, The Harmonicats' 'Peg O My Heart' (Trivial Pursuit freaks take note), which also featured the first use of artificial reverb on a recording. Putnam became closely involved with studio design through necessity and many of his former studios still contain his innovations including Universal Recording in Chicago and United and Western in Hollywood (now Ocean Way and Cello).

Putnam also designed equipment such as mic preamps, speakers and equalizers. His most well-loved designs, the ubiquitous 1176 and LA2A compressors, are still going strong in studios around the world. These classic processors have recently been revived and reproduced by Putnam's sons William and Jim, under the Universal Audio banner.

# New bits from Canford

The Canford audio catalogue is often the place to look for those 'dull but essential' items that we all need from time to time, and the company have recently launched a range of new products.

The Canford Pro-Interface Mk2 is a portable version of their rackmounted pro interfaces, and is a bi-directional stereo interface for matching semi-pro equipment such as cassette machines and video recorders to professional audio line levels. The Mk2 is constructed in an extruded box with four balanced XLRs on the front panel (two male, two female) and four RCA (phono) connectors on the rear.

Also updated are the Canford DMH285 headphones with a frequency range of 10Hz-3.34kHz. Canford claim that the extended frequency response makes the headphones ideal for monitoring in recording and broadcast studios.

**Prices: MK2 £100; DMH285 from £112 (depending on choice of connectors)**
**More from: Canford**
**Tel: 0191 418 1000**
**Web: www.canford.co.uk**

Canford's Pro Interface Mk 2 matches semi-pro equipment to pro line levels.

# Join the Q

Continuing the process of introducing 'Q' versions of some of their units, JoeMeek have launched the VC3Q, a new variation on their VC3 multi-function mic pre-amp. Recently premiered at this year's NAMM show, the VC3Q is essentially the same as its predecessor but with the added bonus of the respected Meequalizer 3-band EQ.

The VC3Q features a preamp with switchable 48V phantom power, XLR mic input and balanced jack line input. The onboard compressor is of the photo-optical type, now with a fully-variable attack control as found on the more upmarket JoeMeek models, and features a ratio that automatically changes with input gain. The unit also features an insert point and has dual balanced outputs for monitoring and recording.

**Price:** £199
**More from:** Joemeek
**Tel:** 01626 333948
**Web:** www.joemeek-uk.com

JoeMeek's VC3Q: a variation on their VC3

# A&R success

Attentive readers and listeners may remember a rather good demo track from DJ Pug, an Italian subscriber to *The Mix*, that appeared on our cover CD back in the November 1997 issue. A glowing review in our A&R Dept described Pug's track 'Sex Electric' as "a brilliantly-conceived and produced demo".

Consequently, Paulo Guiglielmino, together with writing and production partner Jurij Prette, relocated to London and hooked themselves an album deal with quality independent label Tummy Touch (the imprint responsible for discovering and launching Groove Armada, amongst other fine acts).

Re-christened Tutto Matto, the pair have a new single currently on the shelves, while their debut album, *Funkulo* is slated for a March release. It's a funky, disco-house party vibe that the pair specialise in, and pre-release response from those in the know seems to point adamantly towards a high-profile future for the nattily attired Italians. And needless to say, as connoisseurs of *The Mix*, the production is of a necessarily high standard. Remember where you heard it first.

**More from:** www.tummytouch.com

river
PRO AUDIO
THE COMPLETE PRO AUDIO SOLUTION

M-TECH EASYCOPY
CD DUPLICATORS
The M-Tech EasyCopy CD Duplicators offer a professional solution to CD Duplication, with a price ideal for the Pro Audio market. Compact and easy to use, and available as a 1 to 1 or a 1 to 3 machine, just load your master, press GO and the EasyCopy does the rest. Operating "on the fly" the M-Tech EasyCopy gives perfect copies every time.
£499
£899
M-TECH BUILT FOR AUDIO

ALESIS MASTERLINK
ML-9600 HIGH-RESOLUTION MASTER DISK RECORDER
Alesis introduce the extraordinarily powerful Masterlink ML-9600, a superb all-in-one studio solution. With its built-in hard disk recording, digital signal processing and Compact Disk production, the Masterlink delivers polished, professional-quality stereo masters - with the creative control that keeps your music sounding the way you want it to. For the price of a professional DAT recorder, the Masterlink gives you the tools to shape every aspect of CD production.
£1499

MATISSE GOLD CD PRINTER
The Matisse Gold CD-Printer from CopyMax prints laser sharp images onto CD's as well as paper, up to an astonishing resolution of 1440 x 1440 dpi, giving your disks a truly professional finish. Using Micro Piezo Inkjet technology and the latest Bi-directional printing method with logic seeking, the Matisse Gold delivers unbeatable image quality every time, in vivid colour.
1440 X
COMPATIBLE 720 dpi
£559
MAC VERSION ALSO AVAILABLE
DA VINCI £759

MEDIA
RPA has all your favourite brands of media at rock bottom prices.
river CD-R MEDIA
RIVER UN BRANDED CD-R80 from only 72p
RIVER PRINTABLE CLEAR TOP CD-R74 from only 80p
RIVER PRINTABLE WHITE TOP CD-R74 from only 85p
RIVER UN BRANDED DIGITAL AUDIO CD-R74 from only 77p

020 7 231 4805
FAX: 020 7 237 0633
www.riverproaudio.co.uk
e-mail: sales@riverproaudio.co.uk
We accept all major credit cards except for Amex and Diners. All prices INCLUDE VAT.
1 GRANGE YARD
LONDON SE1 3AG

# AES news

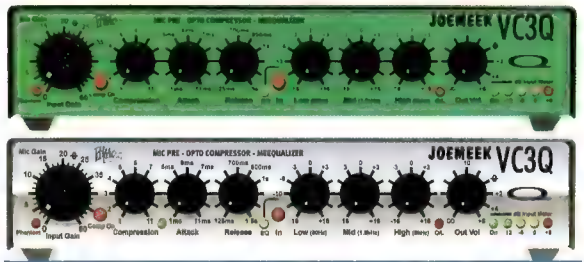
## On the spot from February's AES convention in Paris

Paris in the Spring, *and* the 108th AES Convention – how could we resist? *The Mix* hopped aboard the Eurostar to bring you the latest from the world of high-tech gear…

Genelec were impressing the masses in their own spacious demo room giving regular performances of their 5.1 set-ups, but they also had a few new products on show. The classic S30, for example gets an overhaul, becoming the S30D, and no prizes for guessing what the D stands for. Yes indeed, these digital monitors support AES/EBU, carrying 96kHz/24-bit signals for your listening pleasure. In a similar vein, the 2029B, based on the 2029A, offers the same digital spec.

John Oram was taking an active role at the show, giving a first glimpse of the retro-inspired S80 Producer Box. It's basically the input strip of the Trident Series 80 console, painstakingly reproduced to give the classic warm sound of the original. The S80 is available in mono or stereo versions.

Moving away from their usual rackmount territory, TL Audio have gone funky with the arrival of the Fat1, an affordable stereo valve compressor combining fully-adjustable controls with 15 preset compression programs to help you along. According to TLA, the FAT1 gives more obvious valve colouration than their other ranges. We should be taking a look at this baby next month.




"I don't think we're in Kansas anymore, Toto…" – JoeMeek in chrome, not green shocker

The 480L is dead! Long live the, erm, 960L. Lexicon have built on the success of their highly-regarded 480L to bring you four of them in one box… with a pretty groovy updated LARC to access all those pristine parameters, found inside the 960L. Using algorithms based on 3DPM, or 3D Perceptual Modelling, the new flagship from Lexicon claims to create acoustic environments which sound better than the real thing, and the demo on their stand certainly was very impressive indeed…

There are certain things in life that will never change. Like Norway pulling in nil points at the Eurovision, corrupt politicians, and green JoeMeek units. So what the bleedin' ell's going on here then? The new VC3Q also comes in chrome? Yes indeed, but before you get carried away, there are only two of them in the world, and one's in the USA. JoeMeek's own Jonny Monument tells us there are no plans to put them into full production, but you never know. Expect this JoeMeek-alike to adorn our pages soon.

While we're waiting for Steinberg's eagerly-awaited Nuendo to arrive, we'll tide you over with their PPG Wave 2.V plug-in for VST. Based, surprisingly enough, on the original PPG Wave with its infamous Wavetable approach giving nearly 2,000 waveforms, the current incarnation has been developed with Waldorf to produce this intriguingly versatile VST plug-in.

The updated LARC for the Lexicon 960L – with joystick control for those 3-D environments

Sonic Foundry's Rutger de Groot coping admirably with the demands of a weekend in Paris

Behringer's active monitors – everyone's doing them, but these ones are £300 a pair!

Got a Digi 001? Why not complement it with Glyph's Project X hard drive (bottom).

John Oram shows off his eagerly-awaited, retro-inspired 880 Producer Box. Can we have one, please?

Behringer were certainly looking the part and attracting a lot of interest in their long-awaited Valve units, comprising re-workings of their Composer and Ultra-Gain amongst others. There's also a cool looking Tube-Magician that gives valve warmth to eight individual line level signals – ideal for warming up those squeaky-clean digital signals. Also on display were their new £300 active monitors, and that's £300 a pair! We will definitely be taking a look at those in the near future…

Purple Audio were showing off a new 1U processor called the Eyeball. A striking-looking processor done out in purple (no surprise there) and featuring controls to mix and filter a frequency multiplier, frequency divider, distortion unit, ring modulator and the dry signal. And the results? Subtle twisting of sounds to extreme chaos and anywhere in between.

Dual vocal combo from Langevin, with their unmistakable Manley styling.

Digidesign had probably the biggest stand in the exhibition hall, and wowed us with the show's biggest star (probably). Oh yes, none other than the France's finest, Jean-Michel Jarre, who thrilled us all with a rendition of his Millenium Eve masterpiece which he performed in Egypt last year. J-M allegedly used 89 tracks of audio to create the tune on Pro Tools and didn't we hear about it! "And how many plug-ins did you use, J-M?", "There were soooo many, too many to mention…" A truly superb performance!

While we're talking Digi, the boys at Glyph were showing of their Project X storage device, looking cunningly like a Digi 001 unit. This was a prototype and looks set to go into full production very soon, with Digidesign's blessing. Look out for an avant-garde velvet covered edition too… Nice work, fellas!

The Funky Junk team were making the most of the Paris culture, but took time out to give us an extensive tour of the QMF, or Quad Modular Filter, as previewed in our news last month. And believe us when we say this is a seeeeerious filter-bank. There can be no other! It's strictly limited to 100 units, so be quick off the mark as the order book is filling up. Expect a full-on review next month.

Yamaha had lots to say, not least of all about the creation of a new division – the Commercial Audio Department. The new branch will be separate from their current Pro-Audio Dept. and will concentrate on the live sound and broadcast side of things. On the product front, the PM1D large-format digital mixing console made its debut, as did the DME32 Digital Mixing Engine, offering lots of DSP power for a range of applications. And let's not forget the MSP10s, which are now available in a maple finish.

Sonic Foundry's Rutger de Groot was on hand to tell us the latest from the SF camp, giving us advance notification of new Vegas packages coming soon, as well as an updated Sound Forge on the cards…

Manley were showing no signs of slowing down after the success of their Massive Passive EQ, showing of a new Langevin Dual Vocal Combo – mic preamps, EQ and limiting all in a 2U rack. And with Manley's reputation, this should be worth a closer look.

Roland had a few new bits and pieces on display – the new VS1880 24-bit workstation was looking hot in a VS kinda way, as were the new DS-90A digital monitors, and yes, before you ask they are 24-bit, in case you were wondering. The Groove series also gets a new addition with the 307, designed specifically for DJs and live performance. The SP-808 didn't escape a little tweaking either, becoming the SP-808EX, finished in see-thru plastic

Canford were happy to show us quite a few bits and pieces on their stand, notably a fine pair of headphones, the DMH285, with quoted response down to 10Hz. Don't know about that, but they certainly sounded damn good.

Sony felt so good about their new digital mixing console, the DMX-R100 that they insisted on pulling us all into a demonstration, which we gladly accepted. Smaller and more affordable than the Oxford consoles, the DMX shares a few features with its bigger brothers and should appeal to project-based studios as well as bigger studios.

# INDUSTRY NEWS

## Mike Collins reports on a month in the biz...

The AES Convention in Paris was the place to see and be seen this month. I started out at the Mackie stand, where their Digital 8-Bus Console was looking good with updated version 2 software. But analogue ain't dead yet! The word is that Mackie are selling even more of their analogue consoles than previously and are seriously considering producing an updated version of their classic analogue 8-Bus.

The venue was a pretty confusing place to be. The convention was spread over three floors, each a sort of doughnut-shape, which made the stands difficult to find even with a map to look at. So I tapped a guy wearing black jeans and t-shirt on the shoulder to ask where the Digidesign stand could be found, and he invited me to walk round there with him. Then he introduced himself as David Froker – the new CEO of Digidesign – the very person I was hoping to meet!

There have been some interesting personnel changes at Digidesign recently, partly as a result of Digi going from strength-to-strength while parent company Avid have been losing money. Just a few months back, Avid's CEO William Miller and COO Clifford Jenks both resigned. Shortly thereafter, Avid announced its third consecutive quarter of losses. Digidesign's former COO David Krall and Sales Director Chas Smith have been appointed as Avid's President and COO, and Vice-President of Worldwide Sales and Marketing, respectively.

Meanwhile, David Froker comes across as a very friendly and helpful kind of guy who is likely to continue Digi's run of success, with one Pro Tools TDM system being sold every hour in Europe and 1,000 Pro Control systems having been sold worldwide.

Recently, I helped a friend to get started with Pro Tools. His first question was "Why does it not have drum loops available with tools to easily change the bpm, pitching and so forth – so you can make your rhythm tracks directly in Pro Tools rather than having to use a sampler?" A damn good question – especially for the money you pay! And then I saw it: Mark Gilbert's new Alkali Loop Laboratory plug-in running on Pro Tools at the Digidesign stand! This uses Steinberg's REX file technology to let you instantly change the tempo of an audio loop without pitch-shifting or timestretching.

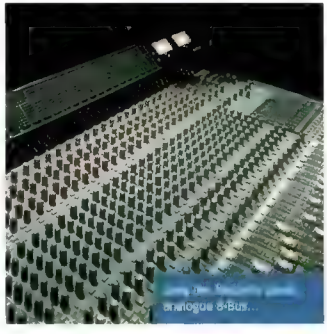
Software synths and samplers are the other things to be seen with. Again on the Digidesign stand, Koblo, Virus and others were strutting their stuff. Koblo's Max Gronlund, sporting a shock of blue-dyed hair, was running around telling everyone to buy their unique 9000 synths instead of copies of analogue hardware. But nearby, Steinberg were showing their LM4 Drum Module, Model E MiniMoog-like synth and their stunning new Prophet 5 simulation for VST – which I personally found more appealing.

If you are into hard-disk recording you can't have failed to notice how more and more disk drives and other computer data storage devices are finding their way into studios these days. Even in a relatively small project studio there may be two or more computer-based systems working on the same project. Glyph's COBA Storage Area Network solution can mix SCSI, Fibre Channel and other 'storage area networking' technologies so you get the best from all these systems.

Talking about networking, Gibson presented a technical paper about their new GMICS (pronounced 'gimmicks'), an Ethernet-based audio and music networking system designed especially for musical instrument connectivity. This can carry 16 channels of digital audio in each direction, along with control information that will allow query and response messages between connected devices.

So, for example, a keyboard player could query the system for a guitarist's volume control onstage – and shut him up! I know lots of keyboard players who would just love to do this, but as a loud Gibson-playing guitar-player myself I can't understand where Gibson are coming from. Still, I'm sure there will be lots of other neat things you can do with this system. The main question is whether the industry as a whole will adopt it like they did with MIDI – or will GMICS be just another gimmick?

Until next time...



HHB CIRCLE

STUDIO MONITORS

ACADEMY OF SOUND
Stoke on Trent Tel: 01782 205100

ANDERTONS MUSIC CO
Guildford Tel: 01483 456777

DAWSONS
Warrington Tel: 01925 632591

DIGITAL VILLAGE
Barnet Tel: 020 8440 3440

DIGITAL VILLAGE
Croydon Tel: 020 8407 8444

DIGITAL VILLAGE
London W3 Tel: 020 8992 5592

EDDIE MOORS MUSIC
Bournemouth Tel: 01202 395135

GIGSOUND
London SW16 Tel: 020 8769 5681

THE GUITAR & AMP CENTRE
Brighton Tel: 01273 676835

THE M CORPORATION
Nottingham Tel: 0115 947 4070

THE M CORPORATION
Ringwood, Hampshire Tel: 01425 470007

MILLENNIUM MUSIC SOFTWARE
Nottingham Tel: 0115 955 2200

MUSICAL EXCHANGES
Birmingham Tel: 0121 236 7544

MUSICAL EXCHANGES
Coventry Tel: 024 7663 5766

MUSIC VILLAGE
Romford Tel: 020 8598 9955

MUSIC VILLAGE
Cambridge Tel: 01223 324536

PROJECT MUSIC
Hounslow Tel: 020 8570 4444

Q MUSIC
Birmingham Tel: 0121 643 4655

SAPPHIRES
London NW2 Tel: 020 8450 0318

SERIOUS AUDIO
London N1 Tel: 020 7609 3999

SOUND DIVISION
London WC1 Tel: 020 7637 9498

SOUNDS LIVE
Newcastle Tel: 0191 230 3422

ROSE MORRIS
London WC2 Tel: 020 7836 9741

TURNKEY
London WC2 Tel: 020 7379 5655

HHB Communications Limited
73-75 Scrubs Lane · London NW10 6QU · UK
Tel: 020 8962 5000 Fax: 020 8962 5050 E-Mail: sales@hhb.co.uk
Visit HHB on line at http://www.hhb.co.uk

# THE RUMOURS ARE ALL TRUE

Accurate. Revealing. Detailed. Untiring.

HHB Circle Studio Monitors deliver the best-value monitoring solutions in the business.

And the good news is spreading fast.

Just one session was all it took for the legendary musician Mick Fleetwood to standardise on Circle monitors for his studios in London, Los Angeles and Hawaii. **"When I heard that detailed, robust bottom end, I said: 'I love them. Where can I get a pair?'"**

Reviewing the Circle 5s, Pro Audio Review concluded **"Detail, clarity, off-axis response and imaging are superb... definitely give the HHB Circle 5s a listen"** while Audio Media said of the Circle 3s **"I fell in love with the active pair as soon as I plugged them in... the Circle 3s sang out loud and proud with a reassuring kick in the gut providing enough bass, while remaining accurate."**

So what are you waiting for? Get your ears down to the nearest HHB dealer and check out Circle monitors today.

*Above (left to right): HHB Circle 5 midfield monitor (active and passive versions available), HHB Circle 1 powered sub-woofer, HHB Circle 3 nearfield monitor (active and passive versions available).*

*Left: Mick Fleetwood with HHB Circle 5 active midfield monitors and Circle 1 powered sub-woofer.*

HHB Communications Ltd · 73-75 Scrubs Lane, London NW10 6QU, UK
Tel: 020 8962 5000 · Fax: 020 8962 5050 · E-Mail: sales@hhb.co.uk

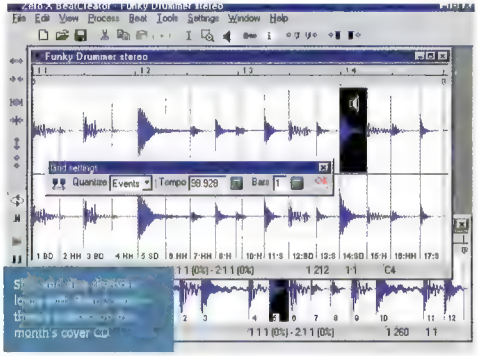
HHB Communications USA LLC · 1410 Centinela Avenue, Los Angeles, CA 90025-2501, USA
Tel: 310 319 1111 · Fax: 310 319 1311 · E-Mail: sales@hhbusa.com

HHB Communications Canada Ltd · 260 King Street East, Toronto, Ontario M5A 4L5, Canada
Tel: 416 867 9000 · Fax: 416 867 1080 · E-Mail: sales@hhbcanada.com

**http://www.hhb.co.uk**

**FIRST WE LISTEN**

# Groovy vacuum cleaner beats as it cleans




Beat Creator is a new groove creating and editing package for PC. Basically, it's a specialised sample editor designed for slicing and dicing rhythmic loops, and is based around a familiar-looking user interface. Samples can be sliced according to either events or a specific note length and the resulting slices can be individually edited and moved within or between loops.

The rhythmic groove from one loop can be imposed on another by moving the grid created by slicing the first loop onto the second, and as the slicing can be based on note length, this can even be applied to sustained non-rhythmic sounds (the makers suggest sampling your Hoover!).

Quantizing, timestretching, rearranging and other editing functions are available within the loop, so exporting it as multiple slices and using a sequencer to modify it is not always necessary. Loops can be exported as a single sample (WAV file or SCSI sample dump) to be used with any software that can play back loops (Acid, Cubase VST or FruityLoops). Loops can also be exported sliced, along with a MIDI or a groove file for the sequencer.

Check out this month's cover CD for a Beat Creator demo, and check it out for yourself.

**Price: US$80**
**Web: www.surf.to/zero-x/**

# Steinberg's cards in two packs

## New audio cards bundled with MIDI/recording packages

PC owners will soon be able to take advantage of two new Steinberg software/hardware packages that aim to provide a complete studio in a box. First up is the Cubase VST Studio Pack for Windows, a 64-channel package combining Cubase VST 3.7 multitrack recording and editing software, Wavelab 2.0 audio mastering and editing with CD burning software and the Steinberg ST 24/96 audio card with its stereo 24-bit I/O, S/PDIF digital I/O and 8-channel ADAT interface.

Less expensive, and aimed at entry-level users, is the Cubasis VST project pack for Windows, a 32-channel system with 20/18-bit stereo I/O, S/PDIF digital output and a microphone input. The package contains Cubasis VST multitrack recording and editing software, Wavelab Lite audio mastering and editing with CD burning software and the Steinberg Project audio card.

**Features: ST 24/96 audio card**
- **2/8 channels stereo/ADAT interface**
- **24-bit/96kHz digital and analogue audio**
- **S/PDIF, AES/EBU, ADAT optical**
- **Simultaneous record and play**
- **Low latency system monitoring**

**Features: Project audio card**
- **2 in/2 out analogue connections**
- **20-bit D-A converter; 18-bit A-D converter**
- **20-bit S/PDIF output**
- **High-quality microphone input**
- **Simultaneous record and play**

**Prices: Cubase VST studio pack £599; Cubasis VST studio pack TBC**
**More from: Arbiter**
**Tel: 0181 970 1909**
**Web: www.arbitergroup.com**

# Boy, it's Phat

Keyfax's Phat Boy hardware controller has had an increase in functionality with the release of Phat Boy V2, a new software revision that increases the number of instruments and applications that can be controlled by its 13 rotary knobs. V2 software is standard in all new Phat Boy units, while existing owners can upgrade with a self-install EPROM.

The unit's number of operational modes has been doubled to six. The first new mode gives direct access to Roland's JV-2080 and JV1010, with control over the major programming parameters plus each of the four tone levels. The second new mode transmits continuous controllers 40-52, while the third transmits the commonly accepted controllers of filter cutoff, resonance, envelope attack, release, reverb level, phaser level, delay level, chorus level, modulation, portamento, expression, pan and main volume.

**Price: £150; upgrade £20**
**More from: Keyfax Hardware**
**Tel: 01491 577147**
**Web: www.keyfax.com/phatboy.html**

# "REASONS NOT TO BUY A MACKIE D8B...ZERO."

—Roger Nichols, EQ Magazine

## PLUS 3 MORE REASONS TO GO FOR IT.

## 1 FREE UPGRADE! NEW OS 3.0 ADDS OVER 30 NEW FEATURES!

Our Programming Department has been chugging the double lattés to create Mackie Realtime OS™ Version 3.0, packed with more new features and enhancements than you can shake a mouse at. Here's just part of what 3.0 adds to the already amazing D8B.

- **New key (sidechain) inputs** for all 48 onboard dynamic processors featuring soft knee architecture and single band 20-20k parametric EQ for frequency dependent processing such as de-essing
- **3rd-party plug-ins** via our new UFX card. Up to 16 simultaneous plug-ins on the first 48 channels, pre or post DSP, pre-fader via up to 4 UFX cards. Each plug-in is available twice – once when tracking, and again at mixdown!
- **Multiple Undo List** — 999 levels!
- New **Snapshot libraries**.
- Externally or internally accessible **inserts across Mains and Buses** plus **channel inserts pre and post DSP**.
- **Updated GUI** including 48-channel fader bank view screen.
- **Time Offset** (delay) adds a delay of up to 999 samples to the signal at the pre-DSP (dynamics / EQ ) point in the signal path.
- **New surround capabilities** including depth-of-center control (LCR mixing with divergence), multiple surround panner window, individual LFE channel level control.
- **Multiple direct outs** per channel.
- **Optional level to tape** fader control.
- **Assignable, bidirectional MIDI control** of all parameters.
- **Cross patching** allows substitution of channels between various banks.

## 2 DSP PLUG-INS!

**Antares' Auto-Tune** for the D8B uses advanced DSP algorithms to detect the incoming pitch of a voice or solo instrument as it's being tracked and instantly pitch-correct it without introducing distortion or artifacts. Fully automatable.

**Massenburg Parametric EQ.** MDW 2x2 High-Resolution Parametric Equalizer plug-in from Grammy-winning engineer/producer George Massenburg. Mono/stereo EQ at 96kHz sample rate for unprecedented clarity and high frequency smoothness.

**Drawmer** offers two dynamics packages for the D8B: ADX100 includes their industry standard frequency conscious gating, plus compression and limiting; ADX200 adds variable "Peak Punch" and further Drawmer innovations.

**IVL Technologies' VocalStudio** provides real time vocal doubling, multi-part harmonies and pitch correction in an easy-to-use interface. A free demo is built-into the Digital 8 • Bus. Just add a second MFX card to own this innovative plug-in from a world leader in vocal processing.

**TC Electronic Reverb** (bundled with the D8B UFX card) provides Reverb 1 and Reverb 2 algorithms from the renowned TC Electronic M2000 Studio Effects Processor. TC FX upgrade package contains an expanded set of M2000 reverbs plus Delay, Chorus, and Pitch. TC 2000 adds the TC M2000's Reverb 3, de-essing, tremolo, phasing, and panning.

## 3 1999 TEC AWARD WINNER!

Normally we don't name competitors in our ads. But in this case, Mix Magazine published the other nominees for the 1999 TEC Award for Outstanding Technical Achievement in Small Format Consoles: Allen & Heath's GS-3000, Digidesign's ProControl, Panasonic's WR-DA7, Spirit's Digital 328 and Yamaha's 01V. Thanks to all who helped us win this prestigious award.

The list of top engineers and producers who use the award-winning Mackie Digital 8 • Bus is growing daily. For info on the D8B, new UFX and Optical • 8 cards, 3rd-party plug-ins and how D8B owners can get their free OS upgrade, visit www.mackie.com or call your local D8B dealer.

MACKIE. Digital Systems
www.mackie.com
Made in the USA

UK • 44.1268.571212 email: mackie.uk@rcf-uk.com • Germany • 49.2572.96042-0 email: info@mackie.de
France • 03.85.46.91.60 email: rcf.commercial@wanadoo.fr • Italy • 39.0522.354111 email: mackieitaly@rcf.it

© 2000 Mackie Designs Inc. All Rights Reserved. The Mackie logo and the "Running Man" figure are registered trademarks of Mackie Designs Inc. D8B and Mackie Realtime OS are trademarks of Mackie Designs. All other trademarks are the property of their respective companies

# open mic

Sponsored by SHURE microphones

Air your views, vent your anger, or share some wisdom... that's what *Open Mic* is all about. Not to mention a Shure microphone for the best letter!

## sound bites

Don't just sit there reading and fuming. Send a letter to *Open Mic* and join in our furious debates...

**Can you hear it?**
24 bit/96kHz – is it worth the extra memory needed to record it? Can we hear the difference? What's the point when it's going to end up on 16-bit CD?

**Quantization**
Does it take the natural ebb and flow out of music? Are we guilty of killing the feel in favour of fitting the music in a fixed-tempo straightjacket? Or have the music-buying public become so used to hearing it that anything else would sound out of time?

**Higher and higher**
20kHz is the limit of human hearing, so what's all this tosh about 'air-band' processing and gear with frequency responses up to 200kHz? Bunch of arse or the future of sonic delight?

**Write to us:**
*Open Mic, The Mix,*
Future Publishing,
30 Monmouth St,
Bath, England
BA1 2BW

**Or email us:**
themix@futurenet.co.uk

## Song vs. track: part II

Having just read the letter from New Zealand's own Barry White (*Open Mic*, issue 73), I feel compelled to argue a few points. Firstly, he seems to suggest that in the absence of lyrics a track cannot stand the test of time. Curiously, he chooses not to cite such lyric-driven masterpieces as 'Green Onions', Glenn Miller's 'In The Mood', 'E.V.A' or indeed the collected symphonies of Beethoven as examples. What a load of nonsense. Of course he will argue that the tracks I mention have a strong melody and groove. I would respond by saying that so do a lot of today's 'electronic' tracks (indeed there are electronic records from ten years ago that still send a shiver down my spine). There certainly is a lot of rubbish out there, but does he mean to suggest there were never crap big bands on the swing dance circuit 50 years ago?

He also goes on to criticise the lack of live playing today by many groups. Who cares? Do the fans of these boy/girl bands care? Mr White is on a fool's errand if he is trying to view modern music as a whole. Of course many pop bands can't really sing or play very well (but if this phenomenon has flourished in the '90s, its roots are planted firmly in the '70s and '80s). However, pop/chart music was never about playing live (why do you think Motown mastered for radio). Anybody who thinks otherwise is kidding themselves.

Of course, most of the great rock acts have had great live shows (and some based their careers on them), but that hasn't changed today. All the so-called 'proper bands' around today play live, as do the great pop bands. So what's changed? Some music is designed to be played live, some isn't. It's horses for courses. Besides, what's wrong with studio music and impeccable production? I've seen the Verve live and do you know what – I found the studio version of 'Lucky Man' to be a thousand times better. It was impossible to reproduce live, and better for it.

Finally, the ill-informed Mr White illustrates his ignorance of all UK music, save for the Top 20 (and perhaps even this) by describing American music as leaving it behind in terms of scope and diversity. What utter, utter rubbish! Having lived as a child and young adult in both America and the UK, I can honestly say that the level of sophistication of the average British person's knowledge (though not always taste) of music in all its genres is light years ahead of many music-loving Americans. There is not a single type of music you can hear on the radio or TV in the US that you don't hear in Britain, but the scope of music you *can't* hear in America that you can in Britain (or indeed many other European countries, for that matter) is enormous.

The fact that Mr White refers to 'electronica' belies

One group are electronic pioneers, the other are kick-ass breakbeat anarchists. But how many of our stateside friends know the difference?

his ignorance. Does he not realise that this dreadfully generalisitic and meaningless term represents the pinnacle of American sophistication when it comes to dance music (no offense intended to the small enlightened American minority – but you certainly are a minority). Two years ago, even the Americans who actually had heard 'electronica' called it techno or dance. The first time The Prodigy heard themselves described that way, they laughed!

In conclusion, what Mr White is actually saying (whether he realises this or not) is that a lot of modern music isn't what he would like to see and hear. Fair enough, I agree, but to try and argue the relative merits of different musical styles is like trying to compare chocolate pudding with steak and chips. I hate the former and love the latter, but who the hell am I to tell Mr White why he shouldn't eat chocolate pudding? Put him in touch with me and I'll be more than happy to broaden his musical horizons.

**Alex Williams, by email**

## Cubase by accident

I read the comments about VST 3.7R1 in *Open Mic* issue 72, and was interested in the letter from Mark Holverson. I too have the latest version of Cubase, and recently had a few problems: slight corruption on the screen when using the right-click menu, intermittent freezing and a whole number of annoying little problems. I have the ATI Rage128 AGP card in my machine, and most of the difficulties pointed to a problem with this card. At one point I could get two minutes' work done, then the machine would display a pretty pattern and reboot.

I solved the problem by accident. I was checking the BIOS settings, selected the wrong option and put the BIOS back into its default state. Don't ask me why but it did work, Cubase is now more stable than I have known it to be, even more so than version 2 on the ST. Now, if only I could get the same result with Windows...

**Malcolm Ramage, by email**

## Be'Twain' the lines

I live in Sydney, Australia and have bought *The Mix* every month for the last year or so. I love all your articles and interviews, particularly those on producers/engineers. One producer that I am incredibly interested in is Robert 'Mutt' Lange. Has there been anything on Mutt in previous issues that I may have missed? I've followed his career for quite a while now, and would love to get my hands on some articles. Particularly anything on the Def Leppard *Hysteria* phase of his career.

**Glenn Campbell, by email**

*We've never interviewed the mighty Mutt, even though he's the producer of one of the most infamous songs in British Singles Chart History, namely Bryan Adams' 'Everything I Do (I Do It For You)'. Readers! Are there any more metal fans out there? Which other producers would you like to see featured in The Mix? Write in and tell Open Mic...*

**Andrea Robinson**

producer extraordinaire

## Win this classic workhorse

The author of the best letter we receive each month wins this classic Shure SM58 microphone. So get thinking and writing – it could be you!

## letter of the month

### Sharing the wealth

I'm a new sound engineer and unfortunately I haven't got a job yet. Here in Athens, Greece, opportunities for this kind of job are very limited. You have to know people from the inner circle – people like studio owners, guys that have already been in the job for years. If you don't, the chances are they will ask for at least two years' experience in the job and will ask you how much you know. I understand that it's a great risk for them to take on an inexperienced person, but I have to start somewhere. Anyway my mail isn't about these problems. I know what to do, I'm just writing about the way things are here.

My opinion about audio engineering is that after graduating from an institute or a school, you have to keep persevering with your knowledge, and I welcome every source of information. That's why I subscribed to your magazine: because I believe you are a valuable source of information. What I want to ask is, how can I get information on the recording processes for famous releases? I mean, how did they do it; how did they make it sound that particular way? In a previous issue of *The Mix* you revealed the secrets and the processes involved in the recording of past releases such as: Portishead's *Portishead*, Radiohead's *OK Computer* and Goldie and Massive Attack's latest releases. I don't remember the number of the issue but I think it would be a good idea to add a section of this kind onto your website – somewhere that'll present the recording processes of some famous and beloved albums. All young engineers want to learn from the experts and I have found that, when I read that issue, some things were more simple than I expected. It's all valuable information – for me at least .

**Borsis Dimitris, by email**

Yes, it is difficult to get a job in this business – as with many rewarding professions, there are too many people chasing too few openings. And you are right in thinking that graduating from a college course does not automatically make you an engineer. College courses are a good start, in that they teach you some theory and give you hands-on experience of equipment, but often they bear little relation to actually working in a studio, where personality and the ability to get on with clients is every bit as important as technical knowledge, if not more so. No serious studio would take someone direct from a college course and put them straight in to engineer a session. The generally accepted route is to start as an assistant, making the tea and coffee and doing odd jobs, all the while getting to watch experienced engineers and see how the job is done on a day-to-day basis. Eventually, if you fit in, you may move on to do the engineering on sessions. To get a foot in the door, get in touch with as many studios as possible and send them your CV, but you must be prepared to start at the bottom working long hours for low wages.

In the meantime, reading *The Mix* will increase your awareness of how albums are recorded and of the techniques used by professional engineers and producers. Although many are notoriously secretive about their methods, others see the bigger picture and are happy (or even feel an obligation) to share their knowledge and experience. Here's to them!

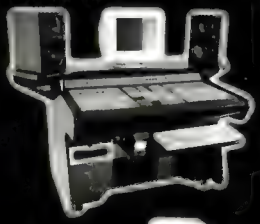
**Andrea Robinson**

OMNIRAX
STUDIO FURNITURE

A wide range of furniture solutions is available for Yamaha 02R and 03D, Mackie D8 and 24/32 analogue, Spirit 328, and Behringer mixers, DigiDesign ProTools and ProControl and a variety of computer and keyboard workstations. Omnirax will provide a clean, uncluttered installation solution to make your working environment functional, comfortable and stress-free. Full technical brochure available free on request.

CODA
MACKIE D8

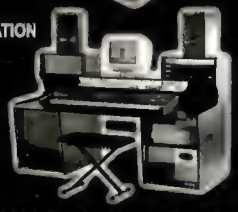
CODA EX
PRO CONTROL



MIXSTATION
02R

COMMANDER

PROSTATION



audioagency 01908 510123 Fax: 01908 511123
audio distributor info@audioagency.co.uk

M-Corporation Available
(Ringwood) 01425 470007 from main
(Nottingham) 0115 947 4070 stocking

EMM Eddie Moors Music dealers
(Bournemouth) 01202 395135

www.omnirax.com

## Who tests the gear

Our team of equipment reviewers are all audio industry professionals, experts in their chosen fields – engineers, producers, remixers, musicians and software specialists. This means that you can trust the opinions expressed in our reviews.

## How the gear is tested

Wherever possible, the gear we test is used in actual sessions. Indeed, some of the biggest-selling records this year will have acted as testbeds for our reviewers. We believe that to truly evaluate kit properly, it needs to be tested in studio conditions – not a dark room!

## Impartiality

Reviews in **THE MiX** are in no way biased towards certain manufacturers. We will deliver an impartial verdict on a product whether or not a manufacturer advertises in this magazine. Our first duty is to you, the reader, and our goal is to give you the best possible advice on buying equipment. We will not hesitate to expose sub-standard equipment.

THE MiX EDITOR'S CHOICE

Products that are judged to be outstanding by our reviewers are awarded the 'Editor's Choice' tag. In a standard review, this means that the product offers exceptional performance for the price it retails for. In group tests, there may be two awards – 'Best Performance' and 'Best Value'. The 'Best Performance' award will go to the product that offers the best performance irrespective of price, while the 'Best Value' award will go to the product that offers the best price/performance ratio.

## *The Mix* reviews team

**Alan Branch**
Producer/engineer/remixer and part of London's famed On-U-Sound production team, Alan's credits include Sinead O'Connor, Bjork, and Primal Scream's newly-released *Exterminator* album.

**Adam Crute**
Adam manages *The Mix*'s in-house recording studio and masters our cover CD every month. A dedicated fan of PC-based music software, mere mention of the word 'Mac' brings tears to his eyes.

**Trevor Curwen**
Engineer/producer and retro fiend Trev was the man behind the desk on some of the best albums of the '90s, including Portishead's *Dummy* and Spritualized's *Ladies and Gentlemen We Are Floating in Space*.

**Steve Evans**
A Bath-based freelance engineer, producer and songwriter, Steve learned his craft both on the road and in his own 16-track commercial studio. His most recent project was a remix of M's 'Pop Muzik'.

**Adam Fuest**
His production credentials take in film soundtracks and acts such as Drugstore and indie band Astrohound. Adam is based 2,500 feet up in the Brecon Beacons, where he runs his own Twin Peaks residential studio.

**David Harrow**
Producer and keyboard player David has appeared on albums by Lee 'Scratch' Perry, Dub Syndicate and Jah Wobble. His alter-ego is drum'n'bass guru James Hardway – expect to see a new album this June.

**Jon Musgrave**
A house engineer at London's Roundhouse studios, Jon's diverse credits include Culture Club, Beverley Knight and Mercury Rev. He recently engineered the Mike Spencer remix of Queen/Bowie's 'Under Pressure'.

**Tim Oliver**
Tim began his career in 'Madchester' where he produced early demos for The Stone Roses. He went on to notch up credits with Gene, M-People, New Order, The Happy Mondays, and most currently, Indigo Girls.

**Seb Pecchia**
Seb earned his spurs as a house engineer at Peter Gabriel's Real World studios. Now in the process of kitting out his own top-notch studio near Bath, Seb will shortly be releasing an album under the moniker 'Snowhill'.

**Sean Vincent**
Having started his career as a tape-op at Matrix studios, Sean has gone on to carve out a successful, and varied, career as a studio and live engineer. He's ridden the faders for Five, 911, Damage and The Honeyz.

# reviews

This month: Kurzweil's latest take on the workstation, new active monitors from Yamaha, Hyperprism re-vamped, Behringer's Composer – now with added valves, Alesis Masterlink, Pure Distribution's Nineteen processors on test, and more…

# Kurzweil K2600

## Synthesizer/sampling workstation

**Price** see box, below
**For** Excellent sounds ⊙ Good upgrade options ⊙ Very programmable
**Against** Expensive ⊙ User interface a little unintuitive ⊙ Very heavy
**Verdict** A professional workstation with sampling as an option and an excellent amount of user control

For a long time now Kurzweil have been producing some of the world's finest keyboards. Their sound has graced many major hits over the years and as a result, they have a loyal following of musicians and producers who just love their way of doing things. When they first developed their VAST synthesis system, people were in awe of the incredible realism, and their piano patches have gone on to win a fair few awards.

The workstation has taken a bit of a back seat in recent years, and even Kurzweil themselves have been suspiciously quiet, but what was conceived in the '80s as an all-in-one solution to MIDI production has become a passion for them. Their K2500 became one of the ultimate workstations, giving the user unprecedented control and flexibility with synthesis, sampling and sequencing as well as quality effects all in one professional package. The K2600 is the next step up – basically more of the same, but with a lot more power, flexibility, control and most importantly, expandability.

## Overview

The K2600 has been developed to be a master both in the studio and on stage, and the spec is incredible. 48-note polyphony, five on-board DSPs, SIMM sockets for additional RAM (up to 128Mb), floppy drive, two SCSI ports, a whole wealth of outputs and an onboard preset count of 438 programs.

Weighing in at a hefty 25kg, the K2600 is a serious bulk to lug around, but it'll mostly live in a studio – if you can afford to tour with one, you can probably afford to pay someone to carry it for you. Being a 76-note keyboard, it takes up a fair old space in the studio.

The big screen is a fluorescent graphic display measuring a useful 240 x 64 pixels. It's also very bright, so there's no need to squint at this one. Adorning the front of the main panel are the various switches and buttons, including the eight faders that control a whole host of features, and to the left of the keys are the pitch wheel, modulation wheel, a small ribbon controller and the 3.5" floppy drive.

The back panel holds all the connections to the outside world, and there are certainly quite a few of them. As well as the standard connections, there are a number of optional connections. Check the box on page 29 for a full rundown.

Running just along the top of the keyboard itself is a whacking 57cm ribbon controller for all you performance freaks out there. Simultaneously using a couple of pedals, two ribbon controllers, mod and pitch wheels would be a feat even Geddy Lee would find challenging, giving the performer the ultimate in expression. And coupled to the realism of some of the onboard patches you can sound like you're giving it some with a Les Paul or throaty sax. Rock on.

So, what's the source of the power behind all this controllability? Well, Kurzweil have their own breed of synthesis known as VAST, or Variable Architecture Synthesis Technology. Basically, VAST gives you five programmable DSP tools for each layer (for 'layer' read 'algorithm'). Usually these are fixed as filtering, pitch, amplitude and modulation, but VAST lets you arrange any combination of DSPs from a very long list, letting you create the kind of synthesis you want for each program.

Each of these DSP functions can be controlled by a variety of sources, including LFOs and envelopes, as well as unique programmable functions and any MIDI control messages. But before we arrive at this stage, the basic building blocks of the sounds come from the waveform samples, of which there are 166. Using a combination of these and processing them using the DSPs, you are able to synthesize almost any sound you want, and the overall effect is excellent. The amount of programming power at your disposal enables the creation of very realistic acoustic simulations, and the creation of some awesome analogue-style synth patches. With the addition of 'Wavesequence'-type waveforms, you can create moving patches that have a life of their own.

VAST isn't the only option on the K2600 for generating sounds. It also features oscillators for

### Prices

- K2600 keyboard version £2,999
- K2600R rack version £2,699
- K2600X 88-key version £3,399

### CD info

**tracks 03-04**
Two factory demos, plus ten of the renowned Kurzweil sounds to feast your ears on...

words
**Sean Vincent**
images
**Gavin Roberts**

This keyboard is designed to be played, but if you just want the sounds and the processing, check out the rack version (p.34)

creating the 'KB3', or organ-type sounds. These are controllable using the eight faders and one mod wheel as the drawbars. This part of the K2600 is completely independent of the VAST side of things, and has its own set of editing parameters.

## Programs

There are three basic modes in which you can operate the K2600: Programs, Setups and Quick Access. Each has its own selector button to the left of the display. Program mode is where you set up and play the programs stored in ROM or RAM. A Program is a saved patch including a sound comprising up to 32 layers and any keymapping or zoning, as well as the effects assigned to that particular sound. The display shows how many layers each program has, as well as the keymap used for that program. Any sound using more than three layers is referred to as a drum program. That doesn't mean it's going to be a drum sound, though. Flutey Leads, for example, is a drum program, but is in fact a rather fine flute patch.

When you're in Program mode, various options for the 'soft' buttons are listed along the bottom of the screen. Basically, these are 'F' or Function keys that refer to what is labelled above them on any particular screen. The default options in this mode are: Octave up, Octave down, Panic (all notes off), Sample, Channel plus and minus. These pretty much speak for themselves – the Channel buttons select different MIDI channels for setting up in multi-mode, the Octave buttons take you up or down an octave and the Panic button sends out an 'all notes off' MIDI message for when things get messed up on the MIDI side of things. Pressing Sample enters the sampler mode, assuming the option is fitted.

Most of the onboard presets are VAST programs, but some are what are known as KB3 programs. The architecture of these is different from the VAST programs because they don't have layers – these KB3 programs rely on oscillators to produce their sound. Essentially they mimic the way tonewheel organs work, and a very convincing job they make of it, too.

Due to the different architecture of the KB3 programs, they don't work on regular channels, so you have to set up one MIDI channel as your KB3 channel. Although you can use any channel you like, unfortunately you can only have one KB3 channel. It's worth noting that although you can't use KB3 sounds on a VAST channel, you can use a VAST sound on a KB3 channel.

Selecting programs on the K2600 couldn't be easier: simply rotate the alpha-wheel to scroll »

### I/O

**Analogue I/O**
2 main TRS outs
8 assignable TRS outs with inserts
1 TRS jack in for sampling

**Digital I/O**
AES/EBU XLRs
S/PDIF optical

**SCSI ports**
Dual 25-pin

**MIDI**
In, out, thru

**Switch pedals**
4

**Expression pedals**
2

Are you in a band, a DJ, do you make any kind of music?

With the tools BT gives you at the site, you can upload your tracks onto the net. They'll be reviewed by your peers, heard by thousands and judged in competitions by industry names – with prizes to further the most promising talent. Give your music the chance it deserves. Get out there.

getoutthere.bt.com BT

through the presets, but the cursor keys can also do this. If you know the program number you're after, just type it in on the keypad and press 'enter'.

## Setups and Quick Access

Setups are combinations of Programs. They can have up to eight zones, each of which can be assigned its own part of the keyboard, MIDI channel and MIDI control assignments. This is where you'll find the kind of control needed for putting together 'one man band' kind of setups. For example, you can have drum sounds and bass guitar assigned to the same notes, but only triggering at certain velocities. This gives the musician the ability to set up the keyboard so it is optimised for playing specific songs live.

A lot of the setups include arpeggiation and note-triggered songs, which allow you to just jam along or use as templates for creating your own setups.

Quick Access is a convenient way of accessing groups of sounds that are stored in banks of 10. There are nine banks in which to store these Quick Access sounds and they can be bundled together in musical style or song setups, for example. The preset Quick Access banks are labelled Film Score, Analog and Keys, to give you some idea of their usefullness.

This means that you can have all your most useful sounds right where you need them and not have to go delving into menus of patches to find them. To make things even quicker, the layout of the patches on the display matches the layout of the numeric keypad, so you just hit the corresponding key and you're away.

## Effects

Ever since the Roland D50, no synth is complete without onboard FX, and as we all know, the right one can make a good patch sound great. And as it happens, the K2600 has an awesome FX section. Based around five separate processors, four of these are designed to operate on their own individual busses, while the fifth is global. In multi-mode this

## specifications

**Polyphony**
48-note

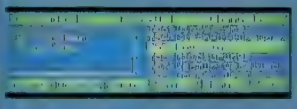
**Waveform ROM**
12Mb standard, 44Mb max

**Sample RAM**
16Mb standard, 128Mb max

**Programs/patches**
438 (238 ROM, 200 RAM). Up to 1000 with PRAM-26 expansion

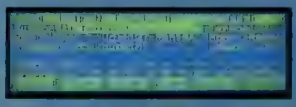
**Sequencer**
32-track

The K2600 has excellent screens to help you get around the various functions. Here's a tour of the main ones:



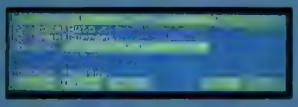
### Program

This is where you can see the list of preset Programs (patches) and select them. On the left-hand side of the display is the information relating to how many layers make up the sound and what kind of Program it is. Along the bottom you have some 'softkey' options for octave up or down, Panic, Sample mode and MIDI channel up or down.



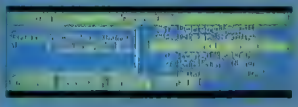
### Song Mode

This is the main sequencer page. From here you can see the current song selected, the volume and panning of the selected track and the status of each. In the right-hand corner you can see the tempo of the track as well as the record mode and locator point. Along the bottom on the 'softkeys' are the transport controls and the access to the mixer page.



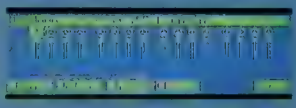
### Effects Mode

As you might expect, this is where you choose the 'studio' or effect setup of your choice. You can set the MIDI channel you want the effect bussed to and also what mode it is in. On the bottom left-hand side of the screen you can also select the dither type. The 'softkeys' control the usual channel up or down and octave up or down, as well as the panic button.



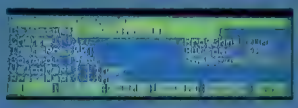
### [illegible]

Here you select the various setup presets. On the left-hand side, it shows you the various keyboard zones where different patches are, or what combination of programs are used. A lot of the setups include arpeggiation and note triggered songs to jam to.



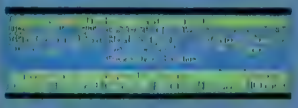
### Mixdown

The mixdown page shows such invaluable information as volume and panning of each MIDI channel graphically, and these can be mixed in real-time, with all fader movements recorded over MIDI for playback in your compositions.



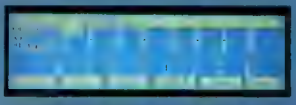
### MIDI Mode

From here you set up the various send and receive parameters, including all the performance controls for each particular patch. You can select the velocity mapping and keymapping, as well as the program change type and local control on/off.



### Quick Access

This is where you should be if you're using the K2600 in a live situation. All of the various Quick Access sounds are laid out in the same way as the numeric keypad for, er... quick access via the keypad numbers. You can have up to 10 sounds in each of the nine Quick Access pages.



### MIDI Faders

This is where you can set up MIDI control data on all 16 MIDI channels and adjust the values in real-time using the eight faders on the front panel. You are given four pages of data to use to control anything you like. This could be used, for example, to control the volumes of another sound source or digital mixer.

### [illegible]

The master page gives you the usual overall tuning options along with transpose, velocity setup and Aftertouch setup. You also set up the intonation from here, to give you weird tunings if required. From here you can also access the vocoder, but only if you have the sampling board fitted.

Mode Selection Buttons
It's here that you navigate around the various modes and screens on the K2600.
Transport Controls
The usual record, play and stop for the sequencer.
Assignable Control Faders
These are the faders that can be used to control the drawbars, MIDI control data, synth editing parameters or just about anything you want on the K2600.
KURZWEIL
Solo, Mixdown and MIDI Faders Buttons
A quick route to some of the more popular uses of the assignable faders.
57cm Ribbon Controller
The ultimate in expression, with three separately assignable zones.
Floppy Drive
A standard 3.5" floppy drive for saving song or program data as well as loading new sounds and software. You can also load Akai, Roland and E-mu format samples here.
Pitchbend, Mod Wheel, Assignable Control Keys and Small Ribbon Controller
Use these to gain ultimate performance control over any given sound.

» enables you to have separate FX on four of the patches and a global effect over the whole mix.

When dealing with effects on the K2600 it certainly helps to understand their terminology. According to Kurzweil, a Studio is the entire effects mode environment, consisting of inputs, FX busses, an aux buss, FX presets, parameter settings, overrides and outputs. Only one Studio is current at a time, and like Programs, they have a number. They can be linked to Programs or Setups using the FX mode setting, and there are quite a few preset studios to play around with or to use as a basis for creating your own.

The K2600 comes with a mighty 111 FX algorithms, ranging from classic reverbs to 3-band compression, and all can be mixed and matched to make effects that can be stored to RAM. There are 419 preset effects to use in your Studio Setups, most of which are excellent, and the real-time control (once again using those faders on the front panel) allows easy tweaking for the perfect mix between patch and effect without having to do too much staring at the menus.

## Sequencing

Although many people will prefer to use the K2600 with a software sequencer, with a major purchase like this you can expect a well-specified, fully editable and intuitive sequencer. What luck then, that the K2600 really delivers in this area. The sequencer is very easy to use, unlike most workstation sequencers.

The main sequencer page shows the song name, volume and panning of the selected track, the tempo, track status, and the various active MIDI channels. It's simply a case setting up the locate points and recording your parts track by track. Obviously you can set up loops and join them together later, a method that is very popular with software sequencers.

By selecting the mixer page you can use the graphic interface to see what the levels and pan are doing and adjust them in real-time, recording the mixer movements for automation, and with 32 tracks at your disposal, there's no reason why this can't be your main sequencer. A nice addition would be a graphic arrange page like those found on all the popular software sequencing packages. Next time 'round, perhaps?

Editing and arranging is a process of copying and pasting using locate points, as on most hardware sequencers. This works very well, and after a little time you can get pretty quick on it, but it's still no match for a decent graphic interface.

## The sounds

The onboard patches, or programs as Kurzweil call them, are awesome. The Concert Piano is so lifelike, especially when played with the expression pedal. In

**Data Entry**
Here you have various ways of entering data including the alpha wheel, numeric keypad, cursor keys and 'softkeys'.

**Keyboard**
The lovely 76-note semi-weighted keyboard has a nice combination of feel and speed.

fact, all the orchestral sounds are there, and very convincing they are, too. You could probably fool a classical fan into thinking they were listening to a real orchestra, no problem.

The analogue-style patches are destined to be some of the most popular sounds. There's loads to chose from and they're all pretty convincing. The Moog basses are wicked, and the Matrix patches are top-notch also. You've got swirling synth pads that sound just like the Jupiters of yesteryear, as well as some of the most up-to-date commercially viable sounds we've heard in a long time. The monophonic analogue leads are so similar to the real thing, no one will ever know. Some of the best sounds aren't really emulations of previous synths, but variations on what we might have heard before. Wart, for example, sounds like it was lifted straight of a Leftfield track (it wasn't).

And then there's the drum kits. From live-sounding kits to full-on industrial noise kits, there's something for every conceivable mus.cal style. As with the TB 303-sounding patch, there is an 808 kit that can be edited in real-time from the faders, just like the real thing. The Lo-Fi Vinyl kit sounds just like it's been lifted off an old '45, and the Jazz kit is just… groovy.

The KB3 sounds are another triumph. Using the eight faders and the mod wheel as drawbars really gives the impression that you're playing a real Hammond through a Leslie cab. There has always been something wrong with synth emulations of Hammonds, but this time Kurzweil have got it right. Check out the Overdriven organ if you get it chance – it's a killer sound.

As a matter of interest, you can load up your favourite sounds in Akai, Roland or E-mu format and treat them the same as all the other sounds by adding effects. Also, in Live mode, you can take a audio input from another sound source and process it using the K2600's DSP as if it was a internally generated sound. (You'll need the sampling board for this.)

## In use

Overall, the K2600 is a joy to use. Unlike some workstations, it's easy to get to grips with the multi-mode, and the sequencer is very self-explanatory. The effects really make a difference, there's been no scrimping by just bunging on a couple of reverbs and a chorus here. The huge array of options in the effects are going to save a lot of time and money because you're not going to need to process these sounds any further. With full MIDI automation and real-time control, you've literally got the world at your fingertips.

Navigating around the screens can be a bit confusing at first, but it soon becomes second-nature when you get used to the beast. It's very similar to

## Options

The K2600 range can be upgraded with some pretty cool optional add-ons:

SMP-2K (£499): The most useful add-on. It turns the K2600 into a fully-fledged sampler. You get analogue and digital I/O as well as more DSP functions.

DIO-2K (£399): This gives you the digital I/O option without the sampling.

PRAM-2K (£349): This is a RAM memory expansion with over 1000 preset locations.

DMR (£799): the digital multitrack interface that allows format conversion between the K2600 and AES/EBU, S/PDIF, ADAT and DA-88.

Also available are various ROM soundbanks (£249 including Orchestral and Pop Classics.

using an Akai S1000/3000 for the first time: kind of odd, but it makes sense in the end.

We put the K2600 to work in the studio and it proved itself to be a very capable sound source and controller. The only problem was that the sounds are so fat and large that you can't really use too many at one time or your mix just gets too full. Clever programming and the sparing use of quality sounds are the order of the day here.

## Verdict

At this price point, you'd expect the K2600 to be a pretty serious instrument, and it is. What you're getting is a keyboard that has been designed to be played. The control element appears to have been at the forefront of the design specification, because you've got every conceivable tool for playing this keyboard with expression. The experienced musician will love the semi-weighted keyboard, two ribbon controllers and all the faders that really aid giving a lifelike performance. We can see this becoming an industry standard for touring musicians with pro bands – they really won't need any more sound sources.

For the studio, the K2600 and the K2600R (rack version – see box, below) are also ideal. Multi-mode is simple to operate, and the MIDI control aspect makes this a very appealing choice. The multiple outputs make it an ideal choice as the main sound source for a pro MIDI set-up.

The only area where the K2600 might not make such a huge impact is in the standalone workstation market. If you're going to spend this much on a synth, you probably won't mind splashing out a few extra hundred on a decent software sequencer. Maybe one day we'll see graphic interfaces on workstation sequencers that'll turn the tables on the software manufacturers. If Cubase can run on a 1Mb Atari, surely someone can develop something similar that would work on a screen like that on the K2600. That really would turn a few heads. Moaning aside, the sequencer is actually pretty good, better than most we've seen on keyboards.

The only problem we had with the K2600 was when using it with an external sequencer. We had three channels happily playing away while we auditioned patches for the next part. But as we scanned through the presets, the volume of the prerecorded parts was varying a lot depending on what program we had selected. It's highly likely that this was caused by some stray MIDI data that wasn't supposed to be there, but we couldn't find it. If this does turn out to be a 'bug', it will undoubtedly be sorted out with the next software release, which can be installed via the floppy drive.

The manual (or 'manuals', I should say) are huge. They're not particularly useful when looking for a specific solution to a problem, but the information is all there, as long as you don't mind a read of *War and Peace* proportions.

Owing to the speed at which technology is moving, no keyboard seems to make the impact that the DX7 or D50 did a few years ago. But maybe the K2600 will. We've only scratched the surface of what it is capable of, and with some clever programming, you'll hear some serious usage out of the K2600 over the next few years. If there's only one keyboard in your studio, it really could be the Kurzweil K2600.

***More from: Arbiter Group, Wilberforce Road London, NW9 6AX Tel: 0181 970 1909 Web: www.arbitergroup.com/mt***

## Don't need the keyboard and controllers? Try the K2600R...

The K2600R is the rack version of the K2600 and has most of the same features as its big brother. Obviously, there's no keyboard or controllers, but you do get a cool feature for trying out a sound without attaching a MIDI keyboard – just hold down the 'cancel' key and play notes using the numeric keypad. Nice touch.

All the outputs are the same, as well as the various optional add-ons if you have the sampling board fitted, the inputs would be on the front panel on the rack version, rather than on the the back as found on the keyboard version.

The main drawback with the rack is the lack of the eight faders found on the keyboard version. All of the parameters editable via the faders can be accessed via the screen, but obviously this takes a little more time and is not so user-friendly. The KB3 (organ) programs where you would normally be able to use the faders as drawbars need a little more patience to set up on the rack version.

Where the rack version really scores is in having the exact same processing power and programs as the keyboard version, but in a convenient 3U rack. We can see the K2600R really taking off in MIDI programming suites and studios. With it, you really are getting a hell of a lot of power in a very compact package.

# Arboretum Hyperprism 2.5

## Plug-in bundle for PC/Mac

**Prices** see box, below

**For** Creative interface › High-quality results › No additional hardware required

**Against** No mono button › Limited waveform editing › Uses a lot of processor power

**Verdict** A highly creative FX processor with a diverse range of pro plug-ins

words
**Jim Warboy**

### prices

- 2.5TDM £445 (20 FX)
- Plug-in pack for Mac and PC £276 (34 FX)
- Standalone for Mac £229 (34 FX)
- Upgrades £95-£195

Aside from the distinctive blue window, if there's one thing that people remember about Arboretum's Hyperprism plug-in bundle, it must be that it's a creative tool with a slightly wacky approach. And faced with that colour, people know something interesting is going to happen – and what's more, that their interaction is going to make it happen.

Hyperprism 2.5 is an upgrade for the PowerMac standalone version, but there's also a Hyperprism plug-in for PC and Mac, a TDM version for Pro Tools and another standalone version for older Macs.

### Overview

Hyperprism 2.5 is essentially a software effects processor consisting of 42 plug-ins, including three new ones, ranging from the regular to the mind-twistingly bizarre. HyperEngine, a free audio editor and host program, is supplied, allowing for real-time multi-effects set-ups without any additional hard/software.

HyperEngine's signal processing uses the Mac's built-in audio I/O, but the provided drivers support use of Audiomedia II/III or Korg 12/12 cards. There's a choice of sample rates, including the usual 44.1 and 48kHz as well as more lo-fi 22.05 and 11.025kHz, and bit resolutions up to 24.

AIFF, SDII and imported WAV files stored on disk can be edited and processed in a window that displays a graphical waveform of the sound. There's not much in the way of manipulation, aside from very basic cut and paste editing facilities to work on stereo or mono files. Looping is available on the main transport bar.

To take advantage of the live performance side of this program, the Play-Thru window allows external audio coming into the Mac to be processed and then output without creating a disk file, though there's an option to record to disk. Both windows include a process list showing the series in which the chosen plug-ins are being used, and the order of these can be changed simply by dragging and dropping in the list.

Some of the effects eat up loads of processor power, especially for real-time processing, so the number of effects that can be used depends on processor speed and the amount of memory allocated to the program.

All in all, the plug-ins fall into five familiar categories: modulation, delay and reverb, filtering, stereo, and miscellaneous. These represent a wide assortment of the most commonly-used effects and processors, plus a few bizarre ones to experiment with. All are stored in the HyperEngine plug-ins folder, and unlike HyperEngine, are copy-protected with a serial number.

The plug-in window features user-definable parameter ranges and sliders that can be used to apply changes, with the parameters available varying depending on the effect being used. Any combination of parameters can be altered in real-time by assigning them to either the horizontal or vertical axis of the blue window, then, when you draw the mouse »

The Granulator's blue window, with parameter sliders and randomisation feature buttons

features

Delay & Reverb
Single Delay, Multi Delay, Echo, EchoTranz, HyperVerb, Room Reverb, Hall Reverb, Granulator

Filters
Low Pass, Band Pass, Band Reject

Modulation
Vocoder, Z-Modulator, HyperPhaser, Chorus, Ring Modulator, Tremolo, Vibrato

Stereo
Pan, Auto Pan, Quasi Stereo, Mono Enhancer

Mastering
Harmonic Exciter, Bass Maximizer, Doppler, Time Stretch, Pitch Shifter, Vari-Speed, Noise Gate, Compressor, Limiter, Sonic Decimator

pointer across the blue window, the values increase or decrease, changing the sound of the effect. Besides the freehand approach, there are also a selection of tools for drawing straight lines, circles, and rectangles, encouraging all kinds of geometrically-inspired masterpieces.

But as if that wasn't enough in the way of control, all of these works of art can be recorded for fully-automated playback, ensuring that none of your doodlings are lost. An in/out button allows you to bypass the effect, making it easy to make comparisons with the original sound.

Some of the plug-ins only work in stereo, although most of them will accept mono signals and process them into stereo if desired.

The processing is non-destructive until it's time to save your work, at which point you can choose to overwrite the original file or process it as a new file. Exporting is available to other formats, such as WAV.

## New effects

The new plug-ins are quite complex and take full advantage of the increased processor speeds that are commonplace these days. Granulator is a tempo-based multi-tap delay, and up to 16 taps, also called grains, can be created. Their timings are divisions of the selected tempo, and grains can be pitched up or down, played forward or reversed, and the length can be altered. Attack and release values can also be set, and the randomisation feature for rhythm, pitch, grain size and attack is great for unexpected results when creativity wanes. Bring up the feedback control and things can get very busy.

Formant Pitch Shifter is intended for use on vocals and melodic sounds. One slider allows pitch-shifting up or down up to two octaves, while another gives control over the formant shifting. Formants, for anyone unfamiliar with the term, are resonances in the vocal tract and are important in giving a voice its character. A male vocal with formants shifted up but leaving the pitch unaffected begins to sound like a female voice. Take formants down and you're heading into Darth Vader territory.

HyperPhaser, the third of the new plug-ins, creates powerful analogue-sounding phaser effects, ranging from subtle slow filter sweeps to eardrum-piercing resonant phasing. By adjusting the depth and bandwidth of the central frequency, spectral notches or peaks are applied to the phaser. This allows a lot of control over the character of an effect, while adding feedback gives a more metallic flanging sound.

## In use

Understanding the interface and allowing the mouse to run wild around the blue window continually develops new ideas, and as is often the case, amazing things can

oPal

DPR-944
2+2
Parametric
Compressor
& Gate

Also in the Opal Series

DPR-422
Dual Compressor/De-Esser

DPR-522
Advanced Dual Noise Gate

FCS-966
Constant Q Graphic Equaliser

Two Precision Noise Gates

Parametric key-filters for precision tuning

Easy-to-read status indication leds

One full-function dynamics processor

Sometimes you never seem to have the right combination of gates and compressors, and use up too much rack space trying to make the best of what you've got. Well, take a look at our DPR-944 Dynamics Processor - four independent channels to patch as you need.

Two high performance noise gates, with absolute precision gating of unwanted side-signals and easy-to-understand shut/open leds. Two full-function compressors with the sonic purity of BSS's proprietary subtractive compression technology, with unique "parametic compression"

BSS Audio A Division of Harman International Industries Ltd.
Cranborne House, Cranborne Road, Potters Bar, Herts, England EN6 3JN England
Tel: +44 (0)1707 660667 Fax: +44 (0)1707 660755 e-mail: info@bss.co.uk

happen when you're least expecting it. The automation feature is really indispensible for capturing those moments.

The manual is supplied on CD, which is fairly irritating as it means there's plenty of skipping between windows trying to read up on a feature and then back to the program to practice your newfound knowledge. But jumping in feet-first isn't a problem, as most of the parameters are instantly recognisable. Sure, you can print out the manual yourself, but when you're paying a couple of hundred for a bit of software...?

Using the new effects separately is fine, but stacking them up with loads of other plug-ins causes the processing to become audibly sluggish, so possessing bundles of processor power is pretty much essential for getting the most from Hyperprism. A processor gauge would make it a bit easier to find the limits.

The Granulator gives simple drum loops new life by generating unusual cross-rhythms. It's quite over the top on vocals, but when used with care, it can provide a refreshing twist to the usual array of delays.

With the Formant Pitch Shifter it's easy to get very weird-sounding vocals, and using it subtly helps to build thicker vocal sections by layering several different variations in your sampler. HyperPhaser, like any other phaser, gives synth sounds a very distinctive character, but there's enough real-time control to give it the edge over more static phasing.

The omission of a mono button on the transport bar makes stereo processing for mono compatibility very difficult, and this would be a useful addition to any future upgrades, as Hyperprism is already widely-used in broadcasting, film and mastering, as well as being a firm favourite in the studio. With musicians spending more time working with digital audio, standalone software processors are increasingly useful and Hyperprism is gaining popularity in these sound editing situations. There are lots of others available, but Hyperprism gives results that are hard to match.

If you already own a sequencer with decent audio facilities, you might prefer one of the Hyperprism Plug-in packs for DirectX or VST, though they don't offer as many effects.

## Verdict

For the money, this upgraded version of Hyperprism delivers a variety of high-quality plug-ins, and the professional results ensure usable audio using both the new and old plug-ins. As well as being functional, Hyperprism 2.5 is a very creative tool, allowing you to push and be pushed into unexplored directions in a blue, blue world.

***More from: Unity Audio, The Elms Barn, Baythorne, Nr. Halstead, Essex, CO9 4AB***
***Tel: 01440 785843 Web: www.unityaudio.co.uk***

## system requirements

MAC
- 120MHz or faster Power Mac upwards
- 200MHz for real-time effects
- System 7.6 or later
- 16Mb RAM

PC
- Direct X
- 133 Pentium
- Win 95 or better
- 200MHz for real-time effects
- 16Mb RAM

## CD info

**tracks 01 & 05**
Try out the software demo, or check out our trial run of the HyperPhaser, Formant Pitch Shifter and Granulator


# Two Compressors with *Dynamic* EQ

***Parametric filter for frequency-selective compression***

***Comprehensive and easily understood metering***

***Precise side-chain tuning using the monitor function***

## OPAL DPR-944 – Dynamic EQ is addictive

This technique, where the VCA is placed in the side chain, not only eliminates potential noise and distortion, but means we can give you a unique tone-shaping ability that we call dynamic equalisation, as found on our successful DPR-901. Using the parametric subtract side-chain filter, you can effectively eliminate sibilance, microphone popping and proximity effects with ease, and tame instrument and voice tonal characteristics that vary with level. Only the frequencies of interest are compressed, the rest of the signal is untouched, unlike conventional compressors. Be warned, though. Dynamic EQ is addictive.

BSS Audio

**BSS Audio USA**
Harman Pro North America, Inc, 1449 Donelson Pike, Nashville, TN 37217 USA
Telephone: +1 (615) 360 0277 Fax: +1 (615) 360 0480

A Harman International Company

www.bss.co.uk

# Yamaha MSP10 & SW10

## Active nearfield monitors and sub-woofer

**Price** MSP10 £645 each, SW10 £763
**For** Very clear, open sound ⊙ Pinpoint stereo imaging
⊙ Pounding bottom end from the sub woofer
**Against** A little overly bright without the treble roll-off
**Verdict** A great, open-sounding monitor system that combines neatly for maximum impact

To say that there's a trend for active monitors would be a bit of an understatement, but it's not just a fashion-led thing. It's more a natural progression through the refinement of driver design, whereas previously any improvement was masked by the mismatch of amp and drivers.

To make any noticeable impression in quality levels, the monitor-makers had to diversify into amplifiers, which they've all done in their droves. But just putting an amp on the back of each monitor doesn't solve the perennial problem of crossover distortion. To overcome that requires an amp for each individual driver, which of course is going to up the price. So when Yamaha announced the launch of a bi-amped monitor for a touch over a grand, studios of all calibres couldn't wait to clap ears on them. Hopes were high that Yamaha might just come up with something to finally condemn the geriatric NS10 to its grave.

### Overview: MSP10

In looks they owe more to the bi-amped Genelecs than to the Yamaha family from the last two decades. They sit a couple of inches higher than the NS10s and a couple of inches broader in the beam, and gone are the white cones on jet black cabinet, replaced by a much more anonymous overall dark grey – they'd blend invisibly at any nearfield monitor party.

The woofer is a 20cm diameter plastic cone attached to the cabinet with a soft rubber flange that has a much easier movement than the rubberised fabric of the NS10. The tweeter is a 2.5cm dome, which is curiously recessed into a solid cone that's an inch or so deep. Generally, the thinking behind soft-dome tweeter design is to increase the dispersion, but the recessing in this case reduces the listening angle slightly.

The MSP10 is a vented cabinet, unlike the NS10, with two bass ports on the front to increase the low-frequency reproduction, which goes down to 40Hz. The only indication that this is an active monitor comes from the green power LED that sits on the edge of the tweeter's hard cone, and this also acts as a clip indicator when there's too much output level.

Without going into the physics of it here, a bi-amped system can get away with much lower-rated amplifiers than a single amped active monitor and still create the same volume. The MSP10 tweeter has only a 60W amp, but that's plenty enough to drive the relatively low energy of the high frequencies with very low distortion. The 8Ω output impedance is exactly matched to that of the tweeter.

The woofer's amp is 120W to handle the higher energy of the low frequencies. Again, the 4Ω output is matched to the woofer's impedance. The crossover frequency is 2kHz with a 30dB/octave roll-off, and in common with most active systems, there are some equalisation options on the back.

A bass roll-off at 50Hz can give 1.5dB or 3dB reduction and a treble control gives ±1.5dB at 10kHz. There's also a low-cut switch for use with the SW10 sub-woofer that shelves from 80Hz, and finally there's a trim control to set the level.

### In use

Initial impressions of the MSP10s by themselves are good, given that there's no sign of the small, bright, honky characteristics of the NS10. They immediately sound very open, and yes, there's some bottom end to them. At this point you might need to sit down and take that in for a few minutes.

The MSP10s are still very bright, which is in character with Yamaha. It takes one back to the days of toilet tissue on tweeters. Fortunately, the treble roll-off switch makes them listenable. It would have been quite funny for Yamaha to have labelled the roll-off in ply rather than dBs: 2-ply, 3-ply… Just a thought. ⊙⊙

words **Tim Oliver** images **Gavin Roberts**

## Surround system

## specifications

**MSP10:**

**Crossover frequency**
2kHz, 30dB/oct

**Frequency response**
40Hz-40kHz (-10dB)

**Dimensions**
265 x 420 x 329 mm

**HF driver**
65W

**LF driver**
120W

**LF speaker**
20cm cone, 4Ω

**HF speaker**
2.5cm Titan dome, 8Ω

**Construction**
Magnetic shielding

**Weight**
20kg

**SW10:**

**I/O**
XLR x 3

**Speaker**
25cm

**Output power**
180W

**Frequency response**
25Hz-150Hz (-10dB)

**Variable low-pass filter**
40-120Hz

**Dimensions**
328 x 459 x 465mm

**Weight**
26kg

Seriously though, they are bright, but the 1.5dB of treble roll-off is enough to bring it into balance. With that switched in, the upper-mids and top are great: very precise and clear and without any tiring, abrasive edge. The separation is magnificent, quite an ear-opener when you're used to listening to passive nearfields, and the music that impressed most was anything with a lot of space in it.

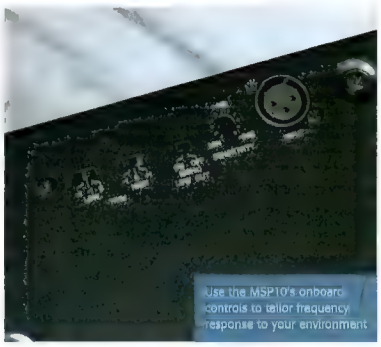
The latest two-step garage compilations sounded wicked/dope/jolly good, and Angie Stone's R&B sounded rich and full, as did Norman Whitfield's Rose Royce productions, but then again they sound good through a piece of string and two baked bean cans. Vocals tended to sit on the mix where they should be, rather than out front as they do with NS10s. In fact, having already mentioned that they look like the active Genelecs, they're not dissimilar in sound also – perhaps with just a bit more presence.

They're ideal for mixing music for TV because you can so effortlessly pinpoint frequencies in the upper-mids, and the sparkle and clarity of the top end is exciting. The frequency range at the top extends to 40kHz (although that is ±10dB). Historically, we've been led to understand that the audible range of human hearing only goes up to 20kHz, but modern thinking suggests that harmonics above that influence the way we perceive the lower harmonics – a theory enthusiastically supported by salesmen of the latest 24-bit/96kHz digital recorders.

The lower-mids are pretty flat too, but slightly overpowered by the brilliance above. It's not enough to prevent a good mix balance, though. The re-mastered CD of John Lennon's *Imagine*, which, apart from George Harrison's slide guitars, is quite a warm record full of electric guitars and pianos, managed to retain an attractive clarity. Supergrass' 'Moving' sounded a bit on the pudgy side, but then again, it is.

The bottom end is good and full as we've come to expect from nearfields. There's much more bottom than the NS10s, but not quite as much as the Dynaudio BM10s. However, the MSP10s can take a lot more power before they start complaining. If there's a slight drawback, it's that without the sub you have to turn them right up to get a satisfying solar plexus punch, at which point the upper-mids start to hurt.

Use the SW10, with its additional I/O provisions, to beef up the bottom end


Use the MSP10's onboard controls to tailor frequency response to your environment

## SW10 sub-woofer

Though the MSP10s do stand up by themselves, for anyone serious about their bottom end the SW10 sub-woofer is a must to get the full effect. Turn on the 80Hz low cut switches on the back of the MSP10s, turn up the SW10 sub-woofer, and suddenly the world's a better place. It's like switching between the nearfields and main monitors, with the extra octave at the bottom filling the room and adding a huge sense of power. It takes a bit of experimentation to find the right placement and then a bit of time to get used to the change, but it sounds much more complete.

Classical music sounds excellent, which is almost certainly down to the active system's low distortion levels, which help both imaging and depth of field. The quality was such that they were showing up as many imperfections in the recording as highlights. One piece by Shostakovic claimed to be a DDD all digital recording but overbearing analogue hiss suggested otherwise. Regardless of that, the stereo picture was so well-detailed you really could shut your eyes and feel like you were there, and the depth of field from front to back was almost eerie in its truth.

The sensitivity and damping seem good: low-level listening is pretty accurate, which is a good thing for mixing. And at the other extreme the headroom is huge – your ears are more likely to turn red before the clip LED does, and in fact, pain stopped us from turning them up to distortion volumes. But ear fatigue didn't seem to be a problem. Even after comprehensive testing at all levels our ears didn't feel at all battered.

## Verdict

The MSP10s are a very true monitor that combines quality with affordability. They're aimed at both the semi-pro home studio and the post-pro suites, the latter as part of the almost obligatory surround monitoring system (see *Surround System* box on page 39). They sound wonderfully clear and open with excellent stereo detailing, but if you want the full experience, don't go without the beautifully compatible SW10 sub-woofer.

***More from: Yamaha-Kemble, Sherbourne Drive, Tillbrook, Milton Keynes, Bucks MK7 8BL***
***Tel: 01908 366700 Web: www.yamaha.co.uk***

# MIXED GRILLE

**SHURE BETA - microphones that perform as well as you do**

**Shure BETA Microphones** are engineered to meet the most exacting standards of the industry's most respected touring sound engineers. Their accurate sound and reliable performance is proven night after night by the world's top live artists on stages around the globe.

**Shure BETA Microphones deliver:**

- Ruggedness and dependability on stage and on tour
- Optimised frequency response for precise sound quality
- Supercardioid polar patterns engineered to minimise feedback
- Shock mounts that virtually eliminate handling noise

FOR THE FULL STORY ON SHURE BETA MICROPHONES AND INFORMATION ON OTHER QUALITY PRO AUDIO EQUIPMENT FROM HW INTERNATIONAL, CALL OUR FREEPHONE TODAY!

**www.hwinternational.co.uk**

FREEPHONE TO RECEIVE OUR PRO AUDIO CATALOGUE NOW!

**0800 7311990**

# Drawmer DF320

Modern Classic

## Single-ended noise reduction unit

**Price** £499

**For** Easy to set up ⊙ Unobtrusive in use ⊙ Two independent noise reduction units

**Against** No single master channel controls when channels linked

**Verdict** Excellent for cleaning up those unruly signals

To fit into our *Modern Classic* series, a piece of equipment doesn't have to be flash, it just has to have been doing the business for some while and still be in production in one form or another. The Drawmer DF320 certainly falls into that category – it's been around in the same form for over ten years.

Flash, sexy and exciting are not the adjectives that spring to mind at the mention of the DF320 – it's much more likely to be compared to a pair of well-worn but comfortable old slippers. It's the faithful friend that never lets you down and is always there to do you a favour… yep, it's about as exciting as thumbing through a pattern book of different shades of denim, but we wouldn't want to do a session without one.

Launched in December '88, the DF320 has been in production ever since. It's a dual noise filter, which is something of a rarity, as while there are several different makes and models of noise gates, there are not many single-ended noise reduction units.

Now, while a conventional noise gate may be able to take on most of the audio clean-up jobs around the studio, there are some tasks that need a slightly different approach. Whereas the conventional gate will only remove noise during low level sections or pauses in the material, a unit like the DF320 can be active all the time, significantly reducing the effect of unwanted noise that might be present in an audio signal.

The trick is to use single-ended noise reduction based on the psycho-acoustic principle that noise is masked by high-level signals, or by signals containing a significant amount of high frequency information. In other words, you only notice the hiss in quiet bits or sonically dull sections of the material. The DF320 works to mask the noise in those quiet or dull sections, letting the signal content mask the noise the rest of the time.

This is done by utilising two distinct elements of processing that can be applied to a signal. Each channel has a downward expander section and a voltage controlled low-pass filter section that tracks the dynamics of the input signal and reduces the bandwidth of the signal path whenever the full bandwidth is not required, thus reducing high-frequency noise. Both expander and filter have their own switching, so that either one or both can be active.

### Overview

The DF320 can either be used as two independent single channel units, or in stereo by linking the two channels via a stereo link switch in the centre of the front panel. Inputs and outputs for each channel are duplicated on both balanced XLRs operating at +4dBu and unbalanced jacks at -10dBv, and while both outputs can be used simultaneously, only one set of inputs can be used at any one time.

As with all Drawmer gear of the period, the front panel is clearly laid out with white legending on a black background, small silver toggle switches and rotary knobs with yellow pointers. There's plenty of scope for checking the effect of the unit's various processes on the signal, both singly and together, as each channel has a master bypass switch and both the expander section and the filter section of each channel have their own in/out switches.

The expander section can be used to unobtrusively close down the signal path when the signal falls below a set threshold, controlled by a rotary knob with a range continuously variable from -50 to +10dB. Attack time is fully-automatic (controlled by sensing the speed of the rising envelope independent of its frequency and changing accordingly), allowing any transients to be preserved. Release time is continually variable from 50ms to 5 seconds via a rotary knob.

A 3-position switch selects one of three different expansion ratios, and ratios of 1:2, 1:5 and 1:20 are available. A second 3-position switch sets the degree of attenuation of the signal, with a choice of -10dB, -20dB

### CD info

**track 06**
The DF320 is put to work on a noisy organ, a hissy tape and a finished mix

### Tracking

When tracking, it is easy to set the DF320 up to safely clean up messy signals without losing any transients or sustained notes. For shutting down excessively noisy signals altogether, the expander has much to recommend it and can be set up to be totally unobtrusive in its action. It was used to successfully shut out all the noise between notes when directly recording a particularly noisy vintage organ, its automatic fast attack allowing all the transient attack of the notes to come through unscathed. On the same session, the filter section was used in the same way to kill the hiss from a close-miked guitar amp without compromising the sound.

With its separate expander and filter sections, the DF320 has been doing the business since 1988

or -40dB, which completely mutes the signal, and gain reduction is indicated on a 5-segment LED ladder.

The Filter section of the channel is controlled simply by a rotary threshold knob graduated from +10 to -50dB. Two modes of operation, Manual and Auto, are available. In Manual mode, a threshold can be set, below which the filter will start to close as the input level falls. In Auto mode, instead of signal level, the filter tracks the frequency content of the input signal.

In addition to the expander and filter, a 50Hz hi-pass filter can be switched in. This not only affects the signal path but also the sidechain circuitry, preventing high levels of extremely low frequency signal from opening the filter. The operation of the filter is indicated by a 9-segment LED ladder.

## In use

The DF320 can be used in a number of scenarios, both while tracking and mixing. One of its original uses in the pre-ADAT and pre-Pro Tools days was to reduce the hiss from tape-based recording systems, both from 2-tracks and from the narrow tape format semi-pro multitracks so prevalent in those days.

With the amount of low-noise digital systems around these days, reducing the hiss from tape is not something most of us need to do on a daily basis, but if the occasion arises when tracks have to be transferred from a cassette or a noisy analogue master tape, the DF320's filter does the job admirably. On this occasion, the DF320 was used to clean up some hiss from an old live recording on cassette that was being transferred directly to CD.

The cassette was played through the DF320 at a point where there was no program material, just hiss, and the filter threshold was rotated anti-clockwise until the hiss disappeared. Once the music started, the filter was switched in and out to see if there was any undue loss of treble content due to its operation. There's often a trade-off to be struck between the amount of hiss reduction that can be achieved and loss of high-frequency definition due to the filter's action, and the threshold control, when set to remove all the hiss, had to be moved back clockwise a little to avoid losing any top end from the music. As a result, there was still a small amount of hiss present, but most of it had disappeared.

Regardless of whether you work with analogue tape, there is still electrical noise from instruments, hiss from guitar amps and noisy outputs from effects processors to contend with, and the DF320 can deal with all these when mixing, either on the insert points of noisy single channels or on a subgroup of offending signals. You can read more about the DF320's tracking applications in the *Tracking* box on the previous page.

## Verdict

The DF320 is one of those solid workhorses that might not be needed every day, but is a damn useful thing to have in your rack. Like that other Drawmer staple, the industry-standard DS201 noise gate, the fact that the DF320 is still in production in its original form after over a decade says it all – this is a classic design.

***More from: Drawmer, Charlotte Street Business Centre, Wakefield, West Yorkshire, WF1 1UH***
***Tel: 01924 378669 Web: www.drawmer.com***

words
**Trevor Curwen**
images
**Gavin Roberts**

## specifications

**I/O**
Balanced XLR, unbalanced jack

**Expander ratio**
1:2, 1:5, 1:20

**Expander attenuation**
-10dB, -20dB, -40dB

**Hi-pass filter**
50Hz with 18dB/octave slope

**Expander threshold**
-50dB to +10dB

**Expander release time**
50ms to 5 seconds

**Expander attack time**
Program-dependent

**Filter mode**
Manual or Auto

**Bandwidth**
10Hz to 22KHz -1dB

# Behringer Tube Composer

## Valve compressor/gate/limiter

**Price** £657
**For** Looks fantastic ⊙ Sounds great ⊙ Well-made
**Against** Inadequate ventilation ⊙ Some controls a little too small
**Verdict** Don't use a plug in – get a plug out!

The Composer bumps and grinds with the best of them, with its rounded and engaging sound

words
**Adam Fuest**
images
**Gavin Roberts**

For some years now, Behringer have been chipping away at the the low end of the pro audio market, pumping out well-built high-quality audio processors of virtually anything that one might need. As many of us have noticed, these have not always been the most original of units, but in their defence, they've maintained an exceptional standard of manufacture and have offered direct mains connection and TRS and XLR connections on everything they make.

One device in particular has earned a place in many a sound engineer's heart, and that is the Behringer Composer. The Composer – and more recently, the Composer Pro – have proved themselves to be essential rack items for both live and studio work. So when in early '99 news started to filter through of a new range of Behringer products that were to introduce valves, we couldn't wait to see them.

THE MIX EDITOR'S CHOICE

## Overview

The Tube Composer is gorgeous – 2U high and somewhat retro in appearance. The front plate is thick brushed steel onto which are mounted no less than 18 Bakelite knobs, 18 switches and four little VU meters. Bringing up the rear we have audio inputs on both XLR and TRS jacks, sidechain in and out for both channels, plus the arbitrary IEC mains adaptor.

All controls are duplicated for channels 1 and 2 unless stated otherwise. First we have the expander gate, featuring variable threshold plus a fast and slow release switch and a ratio control. In use the expander proved to be responsive and stable (unlike some onboard expanders) and showed no sign of chattering or masking the transient of percussive input signals.

Next up is the sidechain external switch and sidechain monitor switch, then the compression section of the unit. All the usual controls are here: threshold, ratio, attack, release and output gain, with switches for both hard-knee and Behringer's 'interactive' variable-knee modes plus sidechain input switch – and yes, you have access to the sidechain from both expander and compressor. Then finally, we have the compressor output gain.

This leaves us with the rather large Limiter control, which has attenuation from OdBm to 20+ and off. And lastly, the Tube-Effect pot, which is marked cold to hot. The tubes in question are 12AX7/ECC83 triodes – not exactly top of the heap in the world of valves, but respectable nevertheless – and separate metering is provided for both gain reduction and tube effect.

Ventilation for the Tube Composer is provided by slots on the top and the bottom of the case. The Composer gets very hot indeed – mounted in a rack with another unit on top, both the Composer and the unit above it got ridiculously heated. For this reason, although the unit is only 2U high, a 3U space should be allowed for it to breathe.

TL Audio got around a similar problem by placing a large vent along the front of their units. The Composer obviously has a lot more going on on the front panel, but perhaps a little more thought should have gone into this – undoubtedly many people will slot the composer into a 2U slot and wonder why their SPX90 display starts to bubble and ooze black goo as its transformer melts.

But enough already. If you read Behringer's blurb you'd think that the Tube Composer was manufactured under license from NASA because of the terminology – there's IKA (Interactive Knee Adaptation), IRC (Interactive Ratio Control) and IGC (Interactive Gain Control). It's actually a compressor with a single valve per channel, commonly known as a Hybrid. This is the concept that lurks in the background of most modern valve-enhanced processors. That said, Hybrids are not to be sniffed at, because, if executed properly, they can provide you with the best of both worlds.

**Little but large**
The VU meters may be small, but they're better than your average strip of LEDs

## In use

Having the Composer around the studio was very rewarding. It's a very usable compressor, and with the use of the warmth control, a very subtle form of EQ. It

wasn't easy to get subtle compression as you would with a Urei or Neve compressor, but with a little juggling and without the aid of the auto function, a relaxed but effective vocal compression was achieved. The best place to use auto functions of any sort on a compressor are in a live situation – in that environment they can provide an immediate solution to your dynamics problems.

But at the end of the day, the Tube Composer is not about being subtle or invisible. This baby loves to show off, and it bumps and grinds with the best of them. And it loves to work hard. Over the space of a few weeks we've used it on everything from a Celtic bodhran to a double bass. On drum ambience it excels and on difficult signals like the double bass, where powerful low-frequency transients fight for position with slapping top end, it proved to be most successful.

In short, it imparted its character onto everything it touched and gave to each instrument a presence that allowed it to be positioned beautifully within the mix – almost as if each sound had a halo about it. This really is one of those boxes that can give a sound charisma in a way that is far more acceptable than any enhancer. Every musician who heard it wanted to use it. So not only do you have an effective compressor, but a box that you can literally pass any signal through to give it that 'something extra'. The expander/gate was effective and chatter-free and for the most part, the unit remained quiet, with the exception of extreme settings where a faint hiss became audible.

There are a few quibbles. The knob for adjusting the threshold is far too small and can be difficult to get just where you want it. This also applies to the ratio control, which proved a little over-enthusiastic in its response. It would have been preferable for the limiter control to have been swapped with the more-used threshold control.

## Verdict

The Tube Composer has been a long time coming, but it's certainly been worth the wait. Not only is it a fully-featured and versatile compressor/limiter that performs both tasks admirably, but it can also be used as a respectable front-end for adding a little bit of tube warmth and edge to otherwise clinical and lifeless sounds, giving you, in essence, what you've probably been missing – the more rounded and engaging sound that is analogue. This is one unit that is definitely not going back to Germany!

***More from: Behringer UK***
***Tel: 01932 588826 Web: www.behringer.de***

## specifications

**I/O:** XLR/TRS jacks

**EXPANDER/GATE**

**Threshold:** Off to +15dB

**Ratio:** 1:1 to 1:8

**Attack:** <1ms/50dB, program-dependent

**Release:** Slow: 100ms/1dB, Fast: 100ms/100dB

**COMPRESSOR**

**Threshold:** -40dB to +20dB

**Ratio:** 1:1 to infinity:1

**Attack:** 0.5ms to 100ms

**Release:** 0.05ms to 5s

**Valve control:** Cold to warm

# Nineteen series: Compressor, FX and Enhancer

## Budget outboard

**Price** £150 each
**For** Great-sounding modules with high-end features ⊙ Inexpensive ⊙ Concise and detailed manuals
**Against** Those colours? ⊙ Transformer hum (prototype fault, allegedly) ⊙ Effects box could get boring with prolonged use
**Verdict** Three budget units for a great price, with colours that make you cringe. Watch out Mondrian, here comes the Nineteen range…

Marketing and promotion are booming areas of all industries these days, be it on the web, in a magazine or on TV – information that hits the potentially cash-rich public between the eyes and cries out 'buy me'. Manufacturers pump small fortunes into this area, basically on the assumption that 'if your worm ain't in the water, you ain't gonna catch a fish.'

So why this rather bizarre intro to a technical article on music equipment? Well firstly it's an interesting observation that affects us all, and secondly, the new Nineteen units from Pure Distribution represent their first venture into an already crowded marketplace – not to mention that the people behind them have wholeheartedly made a lot of effort in getting the right image for their products.

In brief, they wanted to develop a good-looking, great-sounding but very affordable range of outboard gear that nobody will be able to turn away from.

### Overview

The first views of the new range of the aptly-named Nineteen units were at *The Mix* HQ, neatly packed away in three green-coloured boxes. As box one was cracked open, it was kind of a 'stand back and look very long and hard while scratching your chin' type affair. Hair came to mind… it's not that the unit was hairy, but doesn't the design look like a well-known hair care product from L'Oreal? Based on Mondrian's Composition with Red, Yellow and Blue, it's… er… well, you decide.

The white colour of the chassis and the very odd colour combination simply makes this unit, and in fact all the units, look… different. Some of you will love it, some will not. Now, one should never judge by appearances, and although it looks a bit unusual, when you do the touchy-feely bit you'll be surprised – these units are built like tanks. A full metal enclosure, 'nineteen' inch rack-mountable, of course, and at a glance most of what's needed in three units.

They're made up of the Multi-FX Processor (ME1903), Stereo Compressor (CP1902), which also has expanders and enhancers on it, and the standalone Enhancer (EH1901).

Let's start with the Multi-FX unit, otherwise known as the ME1903. The front panel is littered with buttons and LEDs, which get a bit lost in the imaginatively-designed colour scheme. Far left is the power switch, then an array of function knobs. The first allows you to select between the mic preamp stage of the unit, an instrument input, or a line-level input. Nice to have so many options on a unit of this price.

Next, there's the input gain control and the mix level that's continually variable between wet and dry. Central to the front panel is a pair of signal indicators and a clip LED, giving a handy-if-limited visual-activity display, before moving further left to the main effect control surface. A 'function' pot is used to dial in the desired effect, and the preset pot skips through factory-preset uses for that effect. This area of the unit is a little strange, and later you'll see why. The right side of the front panel houses those mic preamps – two of them, in fact, with jack inputs alongside for easy, front-panel connection and level controls for each one.

The rear panel is surprisingly well-equipped for the money, and you'll be pleased to see that there are balanced XLR I/Os, unbalanced RCA (phono) I/Os and

### The hard sell

Pure Distribution say that this range is basically designed to fill the '£600 to spend, so what can I get that's any good' market. The units were designed after consultation with customers and they've addressed many of the familiar problems that we associate with budget gear, with power supplies being a good example. Word has it that there may be a voice channel in the making, a 4-channel gate has been mused over along with a power amp with 85W per channel, and a patchbay. If you have any ideas about specific gear that could be useful, drop us an email and we'll pass it on to them.

words **Seb Pecchia** images **Gavin Roberts**

also TRS jack I/Os. Not only that, but the power transformer is inside the unit and not many manufacturers can claim to have gear at this price without a wall-wart in the equation. Does this signal the end of the black box and crappy power cable? Let's hope so – IEC rules!

## Compressor

Next let's take a look at the stereo compressor/enhancer/expander – and yes, it's all in the one box. Again, try to see past the colour scheme – apologies if you're developing a headache. Anyway, at first glance this unit has more buttons than a Pearly King and Queen, but they're laid out in an orderly fashion. On the left side is the power switch, then the expander section with just the one control. It's effectively there to serve as an expander/gate and eliminate those noise floor problems you can come across when the compressor opens up during those quiet moments.

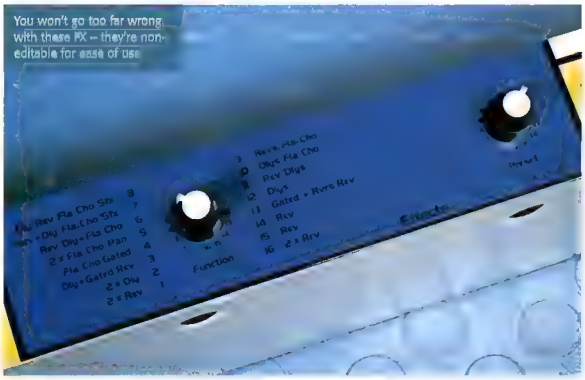
This is followed by the compressor section, which has all the usual features – threshold, ratio, attack, release and output control and an auto processor which, when selected, gives programme-dependant attack and release settings. Move along the line and yet another feature appears, the Dynamic Enhancer.

Again, a one button deal here and, ironically, it's included to sort out the problems that can be caused by over-compressing a signal. Basically, it restores the dull and sometimes over-squished sound caused by lost high-end dynamics and gives a glassy, unobtrusive sheen to the sound. The other channel of this unit is laid out exactly the same… if you can find the other channel amongst the colours… yeah, yeah, broken record. End of moan.

## Stereo Enhancer

The Stereo Enhancer, or multi-band sound enhancement processor – we'll call it EH1901 for now – is the last of the three-part set. Being a stereo unit both channels are the same, so we'll cut to the chase on the controls.

There's one I/O switch that puts both channels of the unit into operation, and a low-mix control determines how much signal is used for sound enhancement. Next to this is the tune control, used to set the frequency of the hi-pass filter from



You won't go too far wrong with these FX – they're non-editable for ease of use

## specifications

**ME1903 Multi FX**

**Inputs**
L/R on XLR, TRS, RCA

**Outputs**
L/R on XLR, TRS, RCA

**Sample frequency**
31.25kHz

**Effects**
256 presets in 16 banks

**Dynamic range**
Dry: 100dB or greater
Wet: 80dB or greater

**Operation**
Dual mono and stereo

1-8kHz. The process button determines the function of the unit – crank it clockwise and you'll be in Exciter country, anti-clockwise and we're over the border and into Enhancer country. Finally, the hi-mix control determines the amount of signal used for sound enhancement.

Now then, a last overview word. The rear panels of both the EH1901 and the CP1902 consist of balanced TRS jack I/O, but on the compressor there's two extra jack bays called Detector Loops, and this is a cracking little feature.

The back of the Multi-FX unit – phono jack and XLR I/O to cover any eventuality

Basically, it's an external control input, and when used, the usual control path is disconnected from the audio signal, the audio signal is then re-routed to the Detector send and return and will then receive the new control signal from an external effects processor, or such like (e.g. an outboard equalizer). Very neat. Remember though, if you're going to use it as a combined in/out insert you'll need those whacky 'Y'-type insert cables.

## Get in there

Without further ado, let's see if these little babies work – and let's blooming hope so, as sometimes all those features for such little cash can get the old alarm bells a-jangling.

Recently we've been doing some commercial writing for some European TV channels – a bit of music for adverts. But they're a finicky bunch in broadcast, so we thought a bit of experimentation with some of the Nineteen units could be fun, but would be swiftly axed if they didn't cut the mustard.

So overwhelming was the feeling of 'no wall-warts' that on powering up each unit, the last thing you'd expect would be a buzzing sound like a bee on the wrong side of a Chicken Vindaloo. The noise from the internal transformer was quite awful, so a quick call to Pure Distribution seemed in order to see what they had to say on the matter… remembering that we haven't even passed signal yet. No excuses were given, they simply explained that there was a problem with

From oozing bass to slap-back, bounding delays and more…

# GET 6 TIMES THE POWER

## ...with the new ULTRA-DYNE® PRO from BEHRINGER: The ultimate 6-band 24-bit mastering processor.

### A new dimension of power mastering

The new BEHRINGER® ULTRA-DYNE® PRO is our ultimate 6-band mastering machine with unheard-of power. Two high-performance DSP's, combined with ultra high-resolution 24-bit A/D and D/A converters, give you perfect multiband mastering with incredible loudness, transparency and sound optimization.

### 6 bands for 6 times the power

Simply stated: the more frequency bands you have, the more loudness you get without side-effects like pumping etc. While the competition offers a mere 3 or 4 bands, the ULTRA-DYNE® PRO delivers ultimate power from 6 bands.

### VIRTUOSO®: mastering magic

You won't believe your ears! Your sound can now stand up to top-rate CD productions. Extreme punch with no dynamic loss. The magic word is VIRTUOSO®, a synonym for intelligent and fully automated parameter settings based on your program material. Quick, easy and always perfect. The incomparable wizard VIRTUOSO®: available only from BEHRINGER®.

### ULTRA-DYNE® PRO DSP9024: experience the ultimate revolution in multiband mastering

ULTRA-DYNE® PRO stands for total power mastering. Next to an explosive multiband Exciter for complete transparency and powerful low end, and a multiband Denoiser®, the DSP9024 features authentic tube simulation for that extra bit of heat in your sound. Hear and experience the ULTRA-DYNE® PRO – and feel free to compare it with any other unit, including broadcast equipment in the $25,000 range.

**But remember to buckle up: the ULTRA-DYNE® PRO is pure power.**

### The ULTRA-DYNE® PRO's powerful features:

- Digital stereo mainframe with two 24-bit high-power signal processors
- State-of-the-art 24-bit A/D and D/A converters from Crystal for phenomenal audio quality
- Up to 600 msec. of delay for "look-ahead" compression, limiting and noise gating
- 6-band compressor with separate peak limiter section
- ULTRAMIZER® function for extreme loudness and signal density
- 6-band noise gate for "inaudible" noise reduction
- Multiband Exciter with adjustable ratio of odd and even harmonics for punchy bass and dazzling highs
- Tube simulation with selection of popular tube types
- Extensive MIDI implementation
- 24-bit AES/EBU digital interface (optional)
- Large high-resolution graphic LCD display
- Servo-balanced XLR and 1/4" TRS inputs and outputs
- Relay-controlled hard bypass with auto-bypass function for power failures (safety relay)

Free downloadable Windows® editor software for ULTRAMIZER® PRO DSP1400P.

http://www.behringer.de/eng/support/software/dsp1400p.htm

2-band power mastering with Exciter, Denoiser® and Surround Processor: The new ULTRAMIZER® PRO DSP1400P. At your dealer's now!

www.behringer.com

**BEHRINGER International GmbH**
Hanns-Martin-Schleyer-Straße 36-38
47877 Willich · Germany
Phone: +49/2154/920666
Fax: +49/2154/920665
Email: support.uk@behringer.de

BEHRINGER
JUST LISTEN.

* Windows is a registered trademark of Microsoft Corporation

©2000 BEHRINGER Spezielle Studiotechnik GmbH
Technical specifications and appearance subject to change without notice.

Once again we see the inherent problems of panel job design by committee...

## specifications

### EH1901 Enhancer

**I/O**
TRS bal/unbalanced

**Detector loops**
TRS inserts

**Low band**
Dual mode bass processor

**Low mix control**
Soft to light

**High band**
Natural sonic processor

**Tune control**
1-8kHz

**Process control**
Enhancer to Exciter

**High Mix**
off to max

**Bandwidth**
10Hz-50kHz

» the transformers in the three prototype models, and that any units for sale would not have the same annoying buzzing noise. Well, let's hope they speaketh the truth.

## CP1902

So now on to the compressor. It's a combination of a hard-knee/soft-knee processor, a halfway-house of a machine if you like. There's no switch to change from hard to soft but it stands up very well indeed. We used it give some wellie to a rather battered old drum sample. The first thing you'll notice is that it actually does both hard/soft jobs very well. Quick attack and release times make for subtle dynamic effects, but crank up some high compression ratios and low threshold settings and it becomes possible to achieve that nice consistent vocal or orchestral sound – this little unit is certainly smooth and transparent.

We needed to give some beef to our drum loop and getting that big fat compressed sound is a balancing act, to say the least. So with an attack time of about 6-7ms and the release set close to minimum, you can get this knockout punch from percussive sounding loops – it hits you bang on the nose.

The CP1902 also proved useful for a quick mastering trial. Using the compressor/limiter on the unit allowed a huge increase in the overall level while not over-disturbing the dynamic of the piece. To get the unit to limit is easy – simply wind the ratio knob clockwise all the way, set the threshold at about 20dBu, a fast attack, and the release at about 0.2ms and you're away.

Using the CP1902, however, can get confusing. Those damn colours mean that taking a quick glance and tweak at the outboard becomes hard graft. You get lost in reds and blues and can't tell from a distance whether you're looking at the expander or the enhancer or what.

Liven up those dull, lifeless sounds, like those caused by tape duplication

## EH1901

Now this unit, the enhancer, can be the making or breaking of your recorded tracks or even a final mix. As mentioned earlier, enhancers are great at sorting out over-compression problems, but they also serve a purpose as an extremely musical processor. If you only have, let's say, a poor-quality tape machine then the enhancer can prove an invaluable tool to be used during a recorded pass to tape. Some manufactures used to use enhancers when »

# The Future at your Fingertips

**Embrace new technology and move forward to a console which combines state of the art devices in a single unit with the most intuitive user interface in the audio industry to date. The Spirit 328 gives you control where it counts.**

2 x Limiters
2 x Gates
2 x 8 Channel A-D
1 x 32 Midi Channel Controller
2 x FX Units
1 x Timecode Reader / Generator
8 Channel D-A
1 x Digital Patchbay
1 x MIDI Data Librarian
2 x Compressors



Free copy of the Spirit Digital Guide to Mixing

digital
three two eight

For more information
http:// www.spirit-by-soundcraft.co.uk
www.digital328.com email: spiritsupport@soundcraft.com

SPIRIT BY SOUNDCRAFT TEL: +44 (0)1707 665000. FAX: +44 (0)1707 665461

A Harman International Company

SPIRIT DIGITAL 328

Send me a brochure on Digital 328

The full Spirit Range

I would use Digital 328 for

DIGITAL MIXING CONSOLE

I read the following magazines:

Name:

Address:

Postcode:

Please send me my free copy of Spirit Digital Guide to Mixing

SPIRIT BY SOUNDCRAFT HARMAN INTERNATIONAL INDUSTRIES LTD., CRANBORNE HOUSE, CRANBORNE ROAD, POTTERS BAR, HERTFORDSHIRE EN6 3JN, ENGLAND. TM

SPIRIT BY SOUNDCRAFT

328 DIGITAL

# EUROPE'S LOWEST PRICES GUARANTEED

**YST-M100 & MSW10**
**MULTIMEDIA SPEAKERS**

OVER 65% OFF!

These are some of the best sounding 'multimedia' speakers we've ever heard. The bi amped system has a total of 65 watts RMS amplification driving the 6½" sub 3½" mids and dome tweeters. There are separate volume, bass, treble and L/R balance controls, and a very hardy headphone socket. Yamaha's patented "Virtual Sound" circuit gives an extra wide stereo effect. Features RCA + miniature ins, removable grilles and full magnetic shielding. Stocks are strictly limited at this unbelievable price - *first come, first served!*

RRP £299
£99 PACKAGE

**NX5R**
**SOUND MODULE**

OVER 40% OFF!

Another 40% off Megadeals !! Korg's improved version of the NX5R has been redesigned with a sleek black finish, and has the previously options XG expansion board now fitted as standard. This means you get a whopping 3365 sounds at 32 channels from the 128 voice tone. It offers an impressive 96 note polyphony and 48 way multimbral engine with full General MIDI and XG compatibility. There are two stereo effects busses with 47 algorithm types.

RRP £549
£349

**ESI4000 SAMPLER**

OVER 55% OFF!

IDEAL OF A LIFETIME!

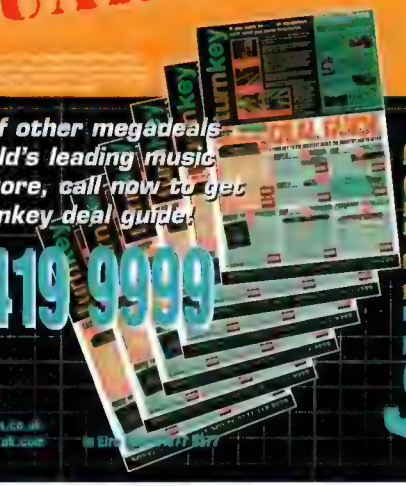
RRP £1299
£569

**EN-VOICE**
**VALVE VOICE CHANNEL**

ALMOST 45% OFF!

This channel strip accepts XLR mic line or instrument level, and provides HPF at 50Hz or 100Hz, three band parametric EQ. The VCA compressor has a ratio of 3:1 to infinity and auto attack / release mode with LED metering. Features post compressor valve mixer/up gain stage for user control of colouration and even optional digital I/O. AudioMedia's David Mellor says "the EnVoice is a particularly flattering and live sounding processor." At this price there's no excuse for not owning one - *buy now while stocks last!*

RRP £409
£249




*For 1000's of other megadeals from the world's leading music technology store, call now to get your free Turnkey deal guide!*

**0171 419 9999**

Fax: 0171 379 0093
114-116 Charing Cross Road
London WC2H 0DT
E-mail: sales@turnkey.demon.co.uk
Web site: http://www.turnkey.co.uk

Professionals are made not born

# ALCHEMEA
College of Audio Engineering

Ashley Steinwald, student.
2 hours sleep between two recording sessions and a digital editing session.
Total duration 42 hours (not including the two hour sleep)

ALCHEMEA, The Windsor Centre, Windsor St, London N1 8QG.
Tel 020-7359-4035 Fax 020-7359-4027 E-mail info@alchemea.demon.co.uk
WebSite www.alchemea.co.uk

duplicating several copies of a tape to allow for generation loss.

The EH1901 can liven up the dull sounds that arise from such problems in sessions. It has a transparent, glassy feel and the controls are quite subtle. It has to be said there are not many units at this level which can boast this kind of quality – it really is quite impressive. Especially smooth in response are the low mix/high mix functions, and it's well worth tweaking them and then sampling the different frequency ratios. If you listen to the demo on the CD you'll hear the piece we were working on for the ad. It is mainly made up of synth sounds and samples, which, after a while, sound very flat and dead. The enhancer was gently incorporated over the final mix, giving a presence and definition to the tracks that was lacking.

## ME1903

Last but not least is the effects unit... hmmm. Out of the bunch this one gets the prize for weirdest-looking and sounding, and in terms of the operating system, this really is 'no ordinary FX box'. The prototype models that we were given to review didn't have any manuals with them so we had to have them beamed over to us. For some reason the ME1901 didn't get here. It would have been nice to have had it, because to quote the guys at Pure "You'd be a bit lost on the operation of this unit without the manual".

Lost? Well no, because we're used to strange gear and actually the results of our exploration were really good. The confusion lies in the two main rotary buttons on the front panel. On the left is the function knob, surrounded by grouped effects and corresponding numbers 1-16, which are written on the unit's front panel. Then on the right is another rotary knob called preset, and again the numbers 1-16 are marked out around it.

The problem seemed to be how these relate to each other. For example, if you set the function knob to '6' – 'Rev/Dly+Fla/Cho' – you would assume that you're getting a combination of these effects all together, and then use the preset knob to select different styles of this combination. The strange thing is that on some functions there are only a few presets or so it seems, and the noises that emanate from the presets are, well, mad.

The great thing is that it's actually a very imaginative piece of kit. There's oozing liquid flangers and phasers, and slap-back delays that bounce around the stereo field like Sampras at Wimbledon. There's massive reverbs and subtle room effects, even reverse reverbs and manic special effects. With no digital readout or detailed parameter control, this is a great plug-in-and-play module, but beware – it could get boring over time and would definitely benefit from having an editable, more expensive counterpart.

The mic preamps are a nice extra – not special, but easy to use and get quick results from if you own an XLR-to-jack mic cable. A headphone socket might have been cool, but these are really picky details. If you do buy one, please check out that transformer problem beforehand, because by wiggling the function key you can make the pitch of the transformer's hum change dramatically, which is a little worrying, unless you enjoy sampling such peculiar things.

## Verdict

The Nineteen range just goes to show that you can never judge by appearances. The colours really do suck big time and didn't look at all cool in the rack, but hey, that's just a personal thing. They also make finding the correct parameter controls a headache, but you could get used to that. The transformers are pretty bad in these prototype models, but the ones that ship with the finished units will hopefully be as quiet as mice.

The sounds that you can get from each unit for the very low price are very good indeed and it wouldn't really be fair to pick them apart. You get a cracking compressor that will make you sound louder than the paint job, an enhancer that does the business in a musical way, plus some very interesting and usable FX – simple or manic, take your pick – coupled to a 2-channel mic preamp and a nice, simple control section. Overall, good value for money.

***More from: Pure Distribution, Stirling House, Kimberley Road, London, NW6 7SF***
***Tel: 0171 328 0660 Web: www.stirlingaudio.com***

## specifications

**CP1902**

**Compressor**

**Compressor section:**

**Inputs/Outputs**
TRS bal/unbalanced

**Type**
Interactive knee control

**Ratio**
1:1 to limiter

**Attack**
0.1 to 200msec/20dB

**Release**
0.05 to 4 secs/20dB

**Output**
-20 to +20dB

**Bandwidth**
6Hz to 50kHz

**Gate/expander section:**

**Threshold**
Off to +10dBu

**Enhancer section:**
Dynamically-controlled frequency correction

## CD info

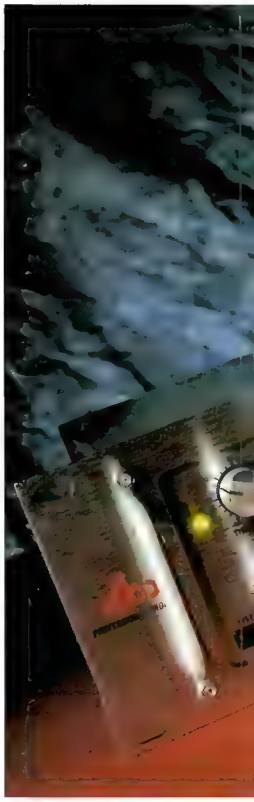
**track 07**
Check out the Nineteen series in action on some music for TV ads

The CP1902 has all the features you expect from compressor, and a smooth sound

# dbx 566 & 504X

## Tube compressor and digital output board

**Prices** 566 compressor £1,000 › 504X digital output board £400
**For** Large range of control possibilities › Valve-drive adds extra sonic possibilities › Illuminated switches and detented knobs
**Against** Power switch located on rear panel
**Verdict** An extremely functional dual-mono/stereo compressor with digital output option



dbx have produced some great compressors in their time, usually with the number 160 somewhere in the name, and while the latest incarnation – the 160S – remains a resolutely upmarket choice, it's now joined by a less expensive addition to the range.

The 566 forms part of the new dbx Silver series and is a dual-mono/stereo compressor with a separate limiter on each channel. A pair of hand-selected 12AU7 valves – one per channel – lurk inside the casing and this vintage technology co-exists with the bang-up-to-date (optional) digital interface, giving the 566 an interesting blend of possibilities.

### Overview

The 566 has all the audio ins and outs you'd expect around the back, along with a few extra ones. Inputs and outputs for each channel are available on both balanced XLR and 1/4" TRS jacks, with nominal operating level switchable between +4dBu and -10dBv. In addition, each channel has a high-impedance dedicated instrument input on an unbalanced jack for use with guitars and the like, which can be enabled by a switch on the unit's front panel.

Separate jack sockets are provided for the sidechain send and return for each channel, with the send tapping the signal before the valve section, allowing it to be used as a pre-valve, line-level output if desired.

If the unit is fitted with the optional 504X digital board, then three function switches are added – an AES/EBU output on XLR, a coaxial S/PDIF output, and two BNC connectors to handle wordclock I/O. On a standard unit a blanking panel covers the area where the 504X would be.

The two identical channels of the 566 are separated by a stereo link switch, with dither and shape switches for the optional 504X digital board. Functionality must have been deemed paramount by the design team, given that each channel is equipped with detented control knobs, which makes matching of left and right channels and exact recall of previous settings a much easier task than on some other units. All of the status switches illuminate when in use, so operating status is easily confirmed with a quick glance across the room.

Brightly backlit VU meters are also easily read and can be switched to show either drive level to the valve stage, gain reduction, or output level. With the combination of the meters, red and green illuminated buttons and its shiny silver front panel, the 566 certainly brightens up the room. And if that's not enough, there are the 'glowing valve' posing slots in the front panel which, of course, serve a secondary function as airflow vents.

### Degrees of squeeze

Compression is controlled by a fairly standard array of threshold, ratio, attack and release knobs. Threshold has a 60dB range from -40 to +20dBu and has an associated switch to change from hard-knee to overeasy processing for a smoother progression from uncompressed to compressed sound.

Three adjacent LEDs indicate the status of the signal relative to the threshold. The bottom LED is lit when the signal is below the threshold, while the top one indicates that the signal is over the threshold and that compression is occurring. In overeasy mode this LED lights when the signal has passed the overeasy portion of the compression curve and is being subjected to the full compression ratio. The centre LED only functions in overeasy mode and illuminates when the signal is in the overeasy portion of the curve.

Ratio is variable from no compression up to infinity:1 hard-limiting ratio. Envelope control can be set

words **Trevor Curwen** images **Gavin Roberts**

### CD info

**track 08**
Hear the dbx 566 work its magic on a piano, then pressed into action as a DI box for electric guitar

Smooth compression or driving grit – the choice is yours with this classy studio workhorse.

manually with the attack and release knobs, or the auto switch can be engaged for program-dependent attack and release times derived from the dynamic characteristics of the input signal. Using the knobs manually, the attack range can be set from a quick 3dB/msec for tight and obvious compression to a more gradual .04dB/msec that lets attack transients through. Release rate is variable from a sharp 250dB/sec to a slower 5dB/sec resulting in a smoother sound.

Complementing the standard compressor controls is the drive knob, which sets the amount of gain applied at the input of the Class A valve stage in the compressor circuitry. This is intended to add some of the different sonic characteristics that valve circuitry can bring to a signal. Any external equipment plugged into the sidechain sockets of the 566 is brought into the equation with the SC Enable switch, and another switch, SC Mon, will allow for monitoring of the sound of the sidechain processing.

A third switch affects the contour of the sidechain by adding a low frequency de-emphasis into the detector path in the same way that any externally connected equaliser might. This serves to help stop any unwanted compression triggered by low frequency signal content. Any gain lost during the compression process can be made up by the level knob at the end of the compression chain, which will provide ±15dB of gain.

Having a peak limiter somewhere inline is always a good safety policy when working with digital systems, which are more unforgiving than analogue tape when it comes to hot signals. Doubtless aware that the 566 may be the final link in the audio chain before a digital master machine, dbx' engineers have equipped it with what they call the PeakPlus Limiter, featuring Intelligent Predictive Limiting. Effectively, the input signal is monitored and the amount of gain reduction needed to keep the output signal below a set threshold is intelligently predicted. Attack and release times for this are program-dependent, and a threshold is set by the final rotary knob in each channel, with a range from 0dBu to its 'off' position at +22dBu.

## Link and sync

Each channel of the 566 can be used as a separate mono compressor, but the two can be linked for stereo operation by engaging the link switch in the

## specifications

**Signal path**
Valve

**I/O**
XLR, 1/4" TRS jack, optional digital outputs

**Attack**
3dB/ms to 0.04dB/ms

**Release**
250dB/sec to 5dB/sec

**Ratio**
1:1 to infinity

**Threshold**
-40dB to +20dBu

**Frequency response**
10Hz to 200kHz

**Weight**
5.5kg

The optional 504X opens up the world of digital connectivity with AES/EBU, S/PDIF and BNC wordclock

centre of the front panel. In this mode, a peak on either side will activate both compressor channels equally, with channel 1 becoming the master controller, with only the sidechain controls and bypass switch on channel 2 being independent of this.

Control options for the 24-bit 504X digital output board are accessed by two buttons underneath the link switch. The Dither switch selects one of two types of dither or none at all, while the Shape switch can bring in one of two different types of noise shaping. The dbx Type IV conversion system implemented here is claimed to enhance the usable dynamic range of the A-D conversion process, preserving the essence of the analogue signal when it is converted to a digital format. This is done by creating a logarithmic 'overload region' in the top 4dB of the converter's linear dynamic range, which prevents the converter from clipping, a process claimed to be analogous to the signal compression effect when you are recording high-level signals to analogue tape.

## In use

Using each channel as a discreet mono compressor, the 566 was put to work on the desk insert points for some individual tracks that were being recorded, and also used to compress some individual tracks on playback. First impressions were that here is a very nice-sounding compressor with a bit of character to it. Half of the ratio knob's travel covered the region between no compression and the 2:1 ratio mark. This allows for a fine degree of control in the setting of these lower ratios, thus providing plenty of subtlety and a very wide range of gentle compression.

The 'traffic light' style arrangement of the three LEDs proved most useful, especially in over-easy mode, where keeping the compression in the soft-knee part of the curve worked out especially well in smoothing out one particular solo vocal performance in a most natural way. The attack and release controls offer plenty of scope for creatively changing the compression envelope, adding a bit of punch to some drums where needed, although Auto mode seems to work well for most sources and is pretty forgiving in general use.

The PeakPlus limiter is extremely easy to set up and does its brickwall job effectively, providing a safety net at the end of the signal chain while managing, for the most part, to be completely unobtrusive. With or without the digital output in place, the 566 is a good choice for adding overall mix compression. Putting the unit in stereo-link mode, compression is applied over a full mix with equally good results as those obtained in dual-mono mode, and having just the one set of controls for both sides of the stereo makes setting-up an easy process.

Plugging an electric guitar into the instrument input reveals the 566 as a great choice for direct recording. Adding a touch of compression, a nice smooth sound can be obtained, and turning up the drive control to the valve stage adds not what you'd call distortion as such, but enough thickness and grit to take the sterility off the sound. Turning up the drive makes the output way too loud, but with the make-up gain knob allowing up to 15dB of cut as well as boost, this is easily brought down to a much more respectable level.

Recording was carried out from both the analogue and digital outputs, and the 504X digital output board provides clear and precise sound when recording to a digital system. Although optional, the 504X is a powerful asset to the 566.

## Verdict

In the 566, dbx have got exactly the right mix of features and the correct degree of control. To be honest, there's little to fault with this unit, and it gave a good account of itself in all its possible roles with whatever was thrown at it, whether applying very mild compression or completely sitting on a signal. The inclusion of instrument inputs adds to the versatility of the unit, as does the valve-drive control and PeakPlus limiter, making the 566 an extremely practical choice of professional workhorse compressor for any studio.

***More from: Arbiter Pro Audio, Wilberforce Road, London, NW9 6AX Tel: 020 8202 1199***
***Web: www.arbitergroup.com***

# DT 100-
# THE FIRST NAME IN STUDIO HEADPHONES...

More hit records and sound tracks have been mixed and monitored on beyerdynamic's range of studio headphones than any other headphones in the world.

Our range of headphones, specifically the DT 100, are acknowledged by hitmaking musicians and by recording engineers for their accuracy and fidelity.

The first name in studio headphones – beyerdynamic... ***Fidelity in Audio.***™

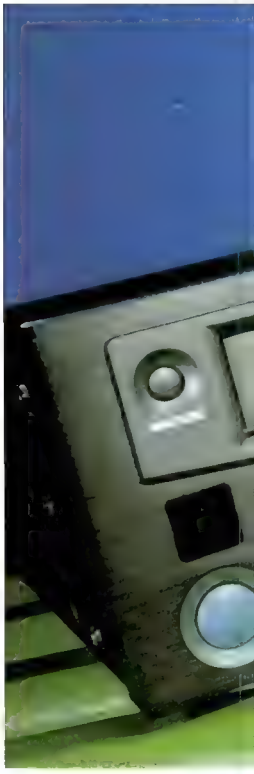
DT 100, DT 150, DT 250, DT 770 Pro & DT 990 Pro– the most complete range of studio monitoring headphones available. Call today for a free colour brochure.

*for more information*
Tel. 01444 258258
e-mail: sales@beyerdynamic.co.uk
Burgess Hill, W.Sussex RH15 9TN

beyerdynamic

# Alesis Masterlink

## Mastering CD-R



**Price** £1,499

**For** 2-track recording up to 24-bit/96kHz ⊙ Multiple playlists, including track names ⊙ Negates the need for a DAT machine ⊙ Uses inexpensive CD-Rs

**Against** Cumbersome cursor buttons ⊙ Software needs updating in places

**Verdict** An absolute winner, despite some minor annoyances. It performs well and sounds great

Naturally you want to master your mixes at the highest possible quality, and you wished you had a DAT player that lasted more than a year before it wrote digital glitches all over that precious master you worked on all night. And what about that spare computer you need to compile mixes and run off CD copies for the record company 'cos they want six copies by first thing in the morning! Well, changes are afoot to ensure these problems become less of a headache, and the Alesis ML-9600 Masterlink could well be just the machine for the job, combining as it does all the above plus some useful DSP possibilities as a bonus.

DAT has been around for quite some time, but you may not remember that it only came about as a studio standard by accident, designed as it was for a domestic market that never really took off. For the studio, however, it meant a replacement for the F1 Betamax digital tape or those mastering to 1/4" analogue tape. Ask any producer or engineer worth their salt what they thought of DAT ten years ago and they probably would have raved about digitally superior quality and how master tapes can now slip into the back pocket after a session. And that's without comparing the price of a reel of tape to a much more inexpensive DAT tape. Ask those guys and girls the same question now and they're more likely to say how frustrating DAT can be and how those tapes of ten years ago won't play any more.

### Overview

So what does the Masterlink do? Well, if you're about to buy a DAT player then you seriously need to see one of these first. It can record at the extreme quality of 24-bit/96kHz and includes a range of selectable sample rates and word lengths, with dedicated front panel switches to easily select combinations of both. You can choose either normal 44.1 and 48kHz as well as the doubled-up rates of 88.2 and 96kHz, together with a choice of 16, 20 and 24-bit. These give 12 possible resolutions, which is enough to suit most.

I/O is included via XLR and phono connectors for both analogue and digital. Interestingly, both digi connections are 'live', meaning signals fed to both would result in errors, so any hardwiring situation would need to go to a patchbay. Inside the Masterlink sits a 4.3Gb IDE hard disk onto which all incoming audio is recorded first. From there it can be topped, tailed and processed, then compiled ready to burn onto the internal 4x write speed CD-R drive. Not bad, eh? There are no computer connections or MIDI, it's purely a dedicated recorder.

The audio spec is where it's at with this machine, featuring a frequency response of 20Hz to 40kHz at the 88.2/96k end, and a signal-to-noise ratio of 113dB, A-weighted. Now that's a lot more than just dog whistle territory. And before anyone starts, yes it does all end up as 16-bit, 44.1kHz on a Red Book CD, but it's the source material and converters that will determine the quality you end up burning. With 24-bit, 128x oversampling A-D/D-A converters, the quality is extremely good indeed when compared to a run-of-the-mill DAT. Even the highly-respected Apogee converters should be worried, but unfortunately none were to hand while testing the Masterlink.

### Recording

Audio is recorded into playlists as tracks, and up to 16 playlists can be made with 99 songs/tracks in each. In each playlist an order of tracks can be arranged as well as track spacing, names, volumes and DSP signal processing. So you could have ten songs recorded and have several different playlists, certainly a good idea

words **Alan Branch** images **Gavin Roberts**

when compiling an album while trying to choose a correct play order.

Editing start and end points – topping and tailing – is achieved with two dedicated buttons, and pressing these either plays the first five seconds or pre-rolls the last five seconds, but holding them down at the same time as pressing the forward or backward scan buttons gives an audible type of tape-scrubbing feature. It's a bit fiddly, but it works very well, and once the desired start/end points are found they can be auditioned before a permanent crop is carried out on the audio file. Fades are also easily achieved, although at the moment only six preset fades are on offer, and with version 1 of the software there are currently no crossfade options, but more should be forthcoming on future upgrades.

## DSP

Onboard DSP includes non-destructive options of compression, equalisation, limiting and normalisation. These are all real-time functions apart from the Normalise function, which obviously has to scan a track for peaks first. Using a Track DSP button on the front panel each 'track' can be assigned a variety of DSP functions. The compressor is of the single-band variety, which was a bit of a surprise because we were expecting more of a 'Finalizer' type multi-band compression for more professional mastering.

There are adjustable parameters of threshold, ratio, make-up gain, attack, release, key release and knee. Certainly a comprehensive set of controls, and remember that overall compression is often used in a studio when mixing, whereas multi-band is mostly left until mastering.

There's no presets list or copy and paste command and each parameter is adjusted by four cursor buttons – left, right, up and down – while different parameters are accessed via the track DSP button, so again it takes a bit of getting used to. Maybe a wheel would have been a better choice than the cursor buttons.

After recording in a few audio files/tracks they can be transferred onto standard CD-R, but unfortunately there's no direct CD recording facility – audio has to be put onto the internal hard disk first. Alesis have developed two ways of storing the audio onto a CD-R: a single button push puts the ML9600 into Red Book mode and your playlist of compiled, high-resolution digital audio is converted and recorded onto your CD-R making a normal 16-bit, 44.1kHz audio CD. If your files include DSP processing then it will bounce it

down to an image file, first calling it a rendered image, and this can be accessed after burning off the first CD for subsequent copies.

Alternatively, audio can be stored as Alesis proprietary CD24 format, which is a mixture of the standard ISO9660 CD-ROM and the AIFF sound file format, together with some ML9600 file information. This retains the high resolution in a file format that can be read by PC and Mac, allowing easy transfer for mastering and a very inexpensive backup, but remember at the 24-bit/96kHz resolution a 650Mb CD-R will only hold a maximum of 19 minutes!

A further single button push marked Create CD is all that's needed once the format and playlist have been chosen. Burning is carried out at 4x speed for audio CD-Rs, whereas the CD24 will take a little longer. A CD24 disk can be loaded and played by any ML9600 like a normal audio CD, but will retain its playlist and track names and, of course, the high sample rate and word length.

## In use

The Masterlink was whipped straight into the studio and put to work, and the old 'will it work without reading the manual?' trick was tried, but we had to give in – it may be a replacement for DAT, but a tape deck it is not! You have to master the fact that all audio is put in via a playlist and an audio track is created, giving a pre-named entry in the playlist for you to record into, much like the pre-allocated file spaces used in a DAW.

Unfortunately, pressing record again without creating a new track just erases the previous entry, so take care. It might have been better to have a warning come up once an initial recording has been made. A new track must be created every time you want to record and audio has to be split into tracks as it's currently not possible to split audio after recording. So in continuous recording you wouldn't be able to create start IDs on the fly as you can on a DAT, which is certainly a limitation of hard-disk recording over tape.

Confronted with this ever-growing wish list, Alesis have said that many of these points are being taken on board and will be addressed in the version 2 software, which will be available on a CD-ROM or by downloading from the net then burning onto a CD-R. They were especially interested with *The Mix*'s comments, as we drew up a pretty good list.

## Wish list

One glaring omission that came to mind was the area of multi-session recording. Currently all recording onto a CD has to be finalised, and while this has to be the case for most domestic CD players, we can't see why the Masterlink has to finalise CDs – if it didn't, you could make amendments to audio tracks as your recording project progresses.

Given the short time available on a high-resolution CD24 it's possibly best to have one track per CD. Enough just to fit on, for example, the main mix, backing track, instrumental and a vocal acappella, which is the norm for mixing in professional studios.

No multi-session also means it won't work with a rewritable CD-R/W. Yes, we did try, but it caused an error message to come up on the display after we took it out. This is where the manual comes in for a bit of stick because it doesn't mention any of these points, and it would have been better if it had just said it doesn't support CD-R/W or multi-session yet.

Alesis have been working on the software for the Masterlink over the past year and were probably unaware of what they could include in version 1.00 software, but a promise of new parameters and functions after our feedback has been made, so full marks for listening – many other companies wouldn't take this kind of feedback so well.

Once you understand recording audio into playlists it's relatively easy. There are some nice touches too, like a large HD free space counter showing your remaining time left, and as it's a standard drive the potential to shoehorn in a huge storage space is tempting – we picked up a 40Gb IDE drive this week for just £170! We resisted the urge to prise open the lid and try it out though, as Alesis might not have been too impressed.

On the other hand, having a small drive ensures you have to back up frequently to free up HD space. Ian Cullen, marketing manager from Alesis' distributor Sound Technology said it will be possible to change the drive yourself, but with the current software they said it should be sent back to them and they will do it for you.

## Compress to impress

We recorded in – and accidentally deleted – a few recordings, then made up different playlists and named all the tracks, although again, the four button cursor controls have you wanting a wheel adjuster like the one found on the Roland JV1080. When entering DSP parameters you have to switch between parameters by pressing the DSP button, then adjust each with the up and down button. This can be quite time-consuming and you can't help thinking that an easier menu system could have been implemented.

The compression works well, and once a ratio, attack, and release time have been set you can alter the threshold and knee setting to get an idea of how the mix is starting to sound. With four different soft knee settings and one hard there's a fair choice, and the overall compression works very well, with no gain reduction metering so you have to use your ears! There is provision for gain make-up so you just have to watch the meters, but there's an on/off for each DSP function, so it's relatively simple to A/B your sound.

A table of useful settings might have been nice to include in the manual, as there is no preset facility here. The 3-band parametric EQ is comprehensive, with a smooth sound, and hopefully all that should be needed is a little sweetening at the top or warming at the bottom, and the Q parameter is both sharp and wide enough for both.

The Digital Limiter is very useful and will probably end up being used by most people wanting level control, and with only a threshold, release and output level it's easy to set up. It includes an auto-gain facility and works much like Waves highly-acclaimed Ultra Maximiser plug-in. It's not, however, a hard-limiter and even when set to a high threshold showed no real sign of crushing the waveform, as was proved when we examined the burned CD24 AIFF file.

Alesis may have set it as a soft, look-ahead limiter so it would be relatively foolproof. Probably a wise choice, again leaving mastering to mastering time rather than when recording your master at its source.

It's also possible to import an audio track of an existing CD into the playlist – it doesn't say how fast it rips the CD, but it seemed like at least 4-5 times speed.

## Verdict

A box to replace DAT? Well, not quite replace, but maybe the question should be 'Is this the new recording medium of the er… zeros?' Well, the answer is probably 'yes'. DAT is far too often unreliable – some machines don't link to each other properly and that's even with the same manufacturer – the list of DAT problems is long.

With the Masterlink you get 24-bit, 96kHz resolution which is well worth it, combined with an extremely inexpensive source of audio storage compared to DAT, although certain CD-Rs can be a bit more costly. It does a very good job of recording a 2-track master in a straightforward way, and with high-quality at that. It will certainly appeal to both high-end studios and the project studio musician because of its usefulness and integration of the existing domestic CD format. Record in your studio then take it next door to play at home.

Surprisingly, other manufacturers haven't copied the idea yet, but we expect a lot of rival companies to be adopting a 'wait-and-see' attitude. Using the Masterlink is a bit cumbersome but that's mostly when accessing DSP parameters – it does come with an infa-red remote, but one that has tiny buttons.

A wheel adjuster would have been helpful, and better software features like support for multi-session CD writing and the ability to split audio tracks, while our wish list includes being able to generate new tracks while in record or a dedicated copy CD function! Some of these are coming in the version 2 upgrade due shortly after this review is published, so don't despair.

The cropping of audio tracks and ability for naming, adjusting volumes and compiling into several different playlists is awesome for so many applications, from recording studios, broadcast, clubs, DJs – the list goes on and on. It has to win as a high-resolution, stand-alone stereo audio recorder using a cheap and readily-available format, and as a CD burner, freeing up the computer for other uses.

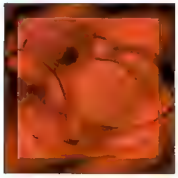
***More from: Sound Technology, Letchworth Point, Letchworth, Hertfordshire, SG6 1ND***
***Tel: 01462 480000 Web: www.soundtech.co.uk***

SAMPLE RATE
WORD LENGTH
INPUT SOURCE
How many CD-R burning options? Switch sampling rates, word lengths and format with ease

## specifications

**Frequency response:**
**@44.1/48kHz**
20Hz-20kHz
**@88.2/96kHz**
20Hz-40kHz
**Signal-to-noise ratio**
113 dB, A-weighted
**A-D converter**
24-bit, 128x oversampling
**D-A converter**
24-bit, 128x oversampling
**Sample rates**
44.1, 48, 88.2, 96kHz
**Word lengths**
16, 20, 24-bit
**CD drive type**
Atapi CD-ROM, 8x read, 4x write
**CD read/write formats**
Red Book, CD24
**Hard disk maximum record times**
95 min@24-bit/96kHz
310 minutes@16-bit/44.1kHz
**Digital I/O**
AES/EBU (balanced XLR) S/PDIF (unbalanced coaxial)
**Analogue I/O**
Balanced XLR, unbalanced phono (RCA)
**Dimensions**
483 x 88 x 279mm
**Weight**
6.2kg

# new releases

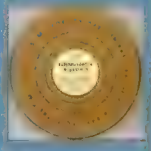


All the major album releases of the month reviewed and rated, our snap verdicts on the best of the rest, and our classic sessions spot *Milestones*

## in brief

LG BUKEM *Journey Inwards* (Good Looking) Bukem's debut album (logically) progresses through the usual easy listening vibes that built his reputation, arriving at a collection of well-produced tracks in need of direction. (DT)

VARIOUS *Disco Cartel* (Hed Kandi) The best in uplifting disco, house and US garage, featuring Paul Johnson, Soulsearcher, and Choo Choo Project, with remixes by Full Intention and Mousse T. (CW)



SUSUMU YOKOTA *Magic Thread* (Leaf) Wonderful abstract electronica from a Japanese artist well-known for his prolific dance output. Film music, ambient techno, avant-garde classical and even traditional Japanese music are all in the mix. *Magic Thread* is compellingly more than the sum of its parts – ambient music at its finest. (SO)

### THE WANNADIES
YEAH
(RCA)

Life after the 'You And Me Song' was always going to be interesting. The dictates of radio programming would willingly pigeonhole Par Wiksten's band as a bunch of melancholic Swedes. But there was another side to that song, namely the vicious attack of the chorus. This album is a macrocosmic juxtaposition of that same classic composition. Aggressive exclamations, backed by walls of guitars, pave the way for acoustic bittersweet paeans during the album's second half, thus presenting arguably the most complete picture yet of what this group has to offer. • *Jon Andre Holley*

**Producers:** Par Wiksten, Rik Ocasek, Mike Hedges
**Engineer:** Brian Sperber, Ian Grimble
**Studio:** Electric Lady
**Verdict:** You'll wannadie for this!.....8/10

### BONE THUGS 'N' HARMONY
RESURRECTION
(EPIC/RUTHLESS)

The unique selling point of BT 'n' H is their amazing rap harmonies (if that isn't an oxymoron). For this alone, *Resurrection* justifies its billing as the West Coast crew astound with their interpolation of soul, melody and Snoop-styled MC'ing. But while the combination of respected producer names such as DJ U Neek, LT Hutton and Darren Vegas stand their ground, providing tough, sinewy, 808-charged percussive ammunition and suitably quirky, sparse accompaniments, the thought of a collaboration between Dre, Krayzie, Bizzy and the brothers overshadows all. • *Jon Andre Holley*

**Producers:** Various
**Studio:** Various
**Engineers:** Various
**Verdict:** Hip hop's Temptations.....7/10

### SIX BY SEVEN
THE CLOSER YOU GET
MANTRA

This is nastier, weirder but thankfully more accessible than their debut *The Things We Make*. The songs indulge in everything from chilled-out melody to full-on rock and by the second track it's clear that they've changed for the better – it's a track that even makes guitars sound exciting again. 'Ten Places to Die' is more reflective but never a drag and Six By Seven manage the tricky task of creating mesmerising songs without sounding self-indulgent. 'Overnight Success' has slow-building grooves while 'England And A Broken Radio' is a step away from Mazzy Star. • *Gabrielle Stackpool*

**Producer:** Ric Peet, John Leckie, Six By Seven
**Engineers:** Ric Peet, Sam Toolan
**Studio:** Square Centre Studios, The Batcave
**Verdict:** Getting closer.....7/10

### EELS
DAISIES OF THE GALAXY
(DREAMWORKS RECORDS)

It starts with a New Orleans funeral march and ends with some funky 12-bar blues as E tells us that "It's a goddamn beautiful day". That statement is braver than it sounds (E has spent the last few years watching relatives die or commit suicide, as narrated on 1998's *Electro Shock Blues*) and is delivered with considerable power and charm in relaxed REM mode. Getting Peter Buck himself in on piano must have helped with the sound, just as recording most of it in E's LA basement surely added to the ironic intimacy of it all. A bittersweet, at times brilliant, album. • *Phil Strongman*

**Producer:** E
**Studio:** E's
**Engineer:** Unknown
**Verdict:** Eeels are good.....8/10

## ASIAN DUB FOUNDATION
## COMMUNITY MUSIC
## (LONDON)

ADF have made the leap into self-production on their third album, and it sounds like they know how to enjoy themselves in the studio. Less manic than 1998's *Rafi's Revenge*, ADF have orchestrated their tracks in a more sophisticated way this time 'round, but the sound is still as forceful as ever. And while all their trademarks are here – the Rasta-tinged rapping, angry punk guitars, expertly-spun breakbeats and Indian classical loops, and bass that delves into moody depths to rival Massive Attack – it's never predictable. If this doesn't get you buzzin', check for a pulse. • *Andrea Robinson*

**Producer: ADF, Louis Beckett, Bobby Marshall**
**Engineers: Simon Morris, Sean Doherty**
**Studio: Roundhouse**
**Verdict: Agitate and conquer.....8/10**

## GENEVA
## WEATHER UNDERGROUND
## (NUDE)

The Geneva debut *Further* went Top 20 some three years ago and this follow-up seems set to do the same, despite being a mildly schizo set. It gets the Tommy D polish treatment while Howie B's productions tend to go more for the live feel. The best piece is undoubtedly the casually epic 'Killing Stars' with its soaring chorus and bubbling synth noises although 'Dollars In The Heavens' has some cynically apt lyrics about astronaut Buzz Aldrin and a great rock'n'roll guitar solo. 'If You Have To Go', the current single, is a well-made ballad that shows the group's diversity. • *Phil Strongman*

**Producer: Howie B and Tommy D**
**Studio: Various**
**Engineer: Various**
**Verdict: Weathering the storm well.....8/10**

## GHOSTFACE KILLAH
## SUPREME CLIENTELE
## (RAZOR SHARP/EPIC)

Yet more side-product for Wu Tang fans, but sadly Killah's second solo outing doesn't break any new ground. Again adopting the Tony Starks/Iron Man superhero alter-ego of his 1996 debut, Killah delivers the goods in his usual confident, rapid-fire way, with various Clansmen turning in cameos. But the subject matter and aggressiveness are too familiar, and for most of the album, the slow to mid-tempo beats and loops are so unvarying they could induce a coma. The occasional outbreaks of singing, meanwhile, sound like kids taking the mick in assembly. • *Simon Ounsworth*

**Producer: Various**
**Engineer: Jose 'Choco' Reynoso**
**Studio: Various**
**Verdict: Too much fillah from Killah .....5/10**

## OASIS
## STANDING ON THE SHOULDER OF GIANTS
## (BIG BROTHER)

From burglars to the Britpoppers who cracked it with attitude, Oasis are now millionaire thirtysomethings. The album starts in twangy Black Grape mode with obscene repeating samples before shifting into Beatles territory with 'Go Let It Out' and 'Who Feels Love'. 'Little James' is pleasant in a magical (mystery tour) way and 'Gas Panic' is an stylish study of paranoia, avoiding the overblown cliches of the preceding 'Put Your Money..', with its T. Rex-meets-analogue synth end. Elsewhere, '70s excess rules. Better than it might have been and yet often predictable. • *Phil Strongman*

**Producer: Mark 'Spike' Stent, Noel Gallagher**
**Studio: Various**
**Engineer: Various**
**Verdict: Oasis by numbers.....5/10**

## in brief

LYTE FUNKY ONES *Lyte Funky Ones* (BMG Records)
Another boy band, but this time they're American, so are able to out-cheese even our boy bands – you get songs about 'your horny body' and 'the way your body moves'. But there are some brilliant pop songs here. (CS)

DJ TEEBEE *Black Science Labs* (Certificate 18)
Slick, hard-ass, atmospheric and minimal take on the darkside that's perhaps not as radical as Norway's TeeBee makes out, but as debut LPs go, it's well worth checking out. (OO)

CHICANE *Behind The Sun* (Reverse)
Well, sounds like that's *The Holiday Programme*'s backing tracks sorted for the next six months. Instrumental atmospherics give way to laid back breezy, vocal house grooves on this amiable yet ultimately unchallenging collection. (OO)

## MILESTONES: 1978

## CHIC
## C'EST CHIC
## (ATLANTIC)

Nile Rodgers and Bernard Edwards were two struggling New York musicians whose musical influences extended beyond their black soul roots. Rodgers had mimed to The Beatles as a child, while both he and Edwards admired the panache of British acts like Roxy Music and Bowie's Spiders From Mars. Rodgers and Edwards began to write together, and after recruiting ex-Patti Labelle drummer Tony Thompson the trio developed their sound. It was a sound defined by Rodgers' choppy, rhythmic guitar, Thompson's driven beats and Edwards' astoundingly supple bass – only Bootsy Collins and Sly Stone's Larry Graham ever came close to Edwards' reach and importance in the USA.

Atlantic half-heartedly issued some singles by Chic, but most of the staff regarded Chic's output as no-hope disco fodder until the unique, galloping rhythms of 'Dance Dance Dance' made this single a transatlantic smash. Atlantic then got serious, allowing them a 'studio orchestra' to play with (22 musicians were involved) and *C'est Chic* was the chartbound result, a fluid yet powerful album that was draped with the silky vocals of Alfa Anderson, Diva Gray, Luci 'Hair' Martin and one Luther Vandross.

Rodgers' mobile arrangements gave Edwards' bass lines a free run, with punctuation coming from blasting horns and Rodgers' own jamming guitar. The album's [illegible] 'Le Freak' had begun as a drunken jam after Chic's founders had been turned away at NYC's Studio 54, but it quickly turned into something special, a dance record with casual energy, a pioneering vocal breakdown as well as a splash of melodic wit. Of Chic's other chartbusters, 'I Want Your Love', brought voice bells back into favour and was the set's one real love song, with its brilliantly realised string backing.

Edwards died in '96, a performer to the end. Rodgers became a world-renowned musician/producer, with a string of million-sellers to his credit for various superstars from Bowie to Madonna. But both could have retired in 1980 and would still have been remembered for forming the band who will be forever chic. • *Phil Strongman*

**Producer: Nile Rodgers, Bernard Edwards**
**Studio: Power Station, NYC**
**Engineers: Various**

# (Em)brace yourself

words **Phil Strongman**

## After rejecting 30 other sound engineers, Embrace chose Tristin Norwell to co-produce the follow-up to their double platinum-selling debut album…

When up-and-coming producer Tristin Norwell recorded and mixed Talvin Singh's 1999 Mercury Prize-winner *OK*, most pundits assumed that left-field dance must be his speciality. Pro Tools? Definitely. Recording the odd live instrument? Well, just maybe, at a stretch. Power-chording electric guitars? Entire band line-ups live in the studio? Forget it.

But the consensus was wrong. Aussie Tristin, despite being the right side of 30, is a modern all-rounder who also happens to be one of the old school. And so his latest major project has been co-producing the much-anticipated follow-up to *The Good Will Out*, the double platinum debut album by Huddersfield's very own rock'n'roll stars Embrace.

So how do you record an album for an act whose previous set has just clocked up sales in excess of half a million? In fact, how do you get in that (super) league in the first place? "Well, I started out as that old chestnut, the engineer's tea-boy," explained Tristin from his hideaway project studio atop London's Strongroom recording complex. "It was back in Trafalgar Studios, Sydney, that's where I learned all the basics: recording guitars, miking up amps, miking up drum kits with just three or four mics and still getting a nice sound, recording entire groups live in the studio, I did the whole bit."

Then came a a trip ha.fway around the world, to Dave Stewart's Church Studios in Crouch End – work that included building the basement's Crypt songwriting suite. This later led to Spanish-based sessions with esteemed sound master Johnny Dollar. "Working with him was an eye-opener since we spent half the time playing golf but he was – still is – a bit of a hero of mine, and I did learn a helluva lot from him. He's got such a new approach to things. I was still bursting with ideas when I started on Talvin's album."

The recording of *OK* involved Tristin lugging his Pro Tools setup to New York City, Okinawa, Japan and Madras, India – amongst other places – where the rig's "ability to get things down fast helped a lot. Especially in Madras, where we were working with some of the best musicians in India, in one of the Bollywood sound studios. A lot of the time we got down some really good live jams and found out that when we played them back, they were perfect for the album."

After the Mercury Prize win came Talvin'n'Tristin's remix for Madonna's 'Nothing Really Matters' single – again a mix done live with just one edit – and then… enter Embrace. "I was always fairly confident that I could get a pretty good sound with a guitar group like Embrace, if only we could get along. Sometimes artists can be a bit awkward, and sometimes producers and engineers can be too domineering or whatever and then they and the band fall out."

You can say *that* again. In fact you can say that some 30 times, because that's the number of producers and sound engineers that Embrace are alleged to have tried (and rejected) for their second album, before finally settling on Norwell. "I just think that they »

Photo: Kevin Westenberg

Embrace didn't want to record their second album in an "air-conditioned conveyer belt" of a studio

c: Netscape Online

File Edit View Help

Name | Size | Modified

JOY

Enjoy full access to the Internet with the people who made it accessible in the first place.
Enjoy it for nothing but the price of a local phone call. Enjoy Netscape Online.

100% NET. 100% FREE.*

In association with Future Publishing. 0800 923 0009 See cover CD or www.netscapeonline.co.uk/future

* Excludes phone calls charged at local BT rate. Technical Support charged at premium rate (50p per minute).

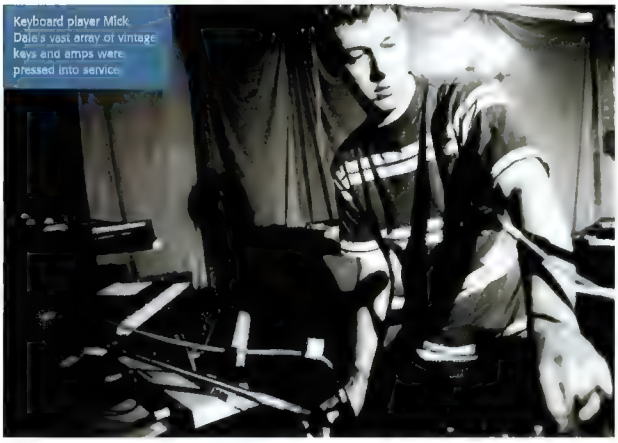
[Embrace] are good people," he now says. "And I couldn't believe, after all I'd heard, how together they really were. Protective of their work, of course, like Talvin – like most top acts – but basically they struck me as being guys I could work with. I always see the producer's role as being like a facilitator, you can – and should – always make suggestions, but ultimately you're there to help the act get their ideas across."

The recording of *Drawn From Memory* began in January 1999 with months of songwriting up in Leeds, initially in the city's Soundworks Studio. "We were getting some nice ideas down as they'd brought several songs along, and they were getting them tighter and tighter. For me one of the best things about that time was visiting [keyboard player] Mick Dale's house. He's got loads of old keyboard and amps and so on. So we decided to use lots of the band's old gear. Mick dug up his Logan string machine and got some great sounds out of it, and there was even talk of using a Bontempi organ he'd been given when he was six, but sadly it died on us.

"Mick's also got a tremendous hi-fi and he suggested that the best three things in his system, the Mana Acoustic soundstages, the Naim amps and the Russ Andrews cables, would all make our final recordings sound a little bit better. With the same amps being used and with Mana soundstages under the monitors we knew we'd get some nearfield consistency too. I mean, virtually every studio uses Yamaha NS10s because the owners want things to sound like the industry standard, but then they all use different amps and cables and supports so their NS10s all end up sounding different anyway."

The high-end hi-fi tweaks were not, however, destined to be used in Leeds. "I mean, that studio is okay, but after more than five months in there we were getting stir-crazy" Norwell admits. Or, as Embrace's keyboardist Mick Dale tells it: "We were all getting bored, losing it a bit. I mean everyone was, even Tristin. I walked into the control room one day and he was just sitting there wearing this huge turban with bits of fruit hanging off it..." And neither band nor producer really wanted to go into yet another studio to finish writing and then record for another two to three months. "We'd been in too many places that are like air-conditioned conveyor belts," says Dale: "In some studios there's just no feel for the music, no interest. You just happen to be the group that's paying the bills that week, that's all – another session, another mortgage payment."

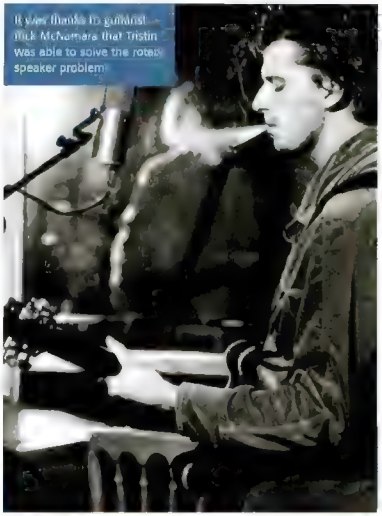
Instead, Tristin asked Virgin, the band's label, to



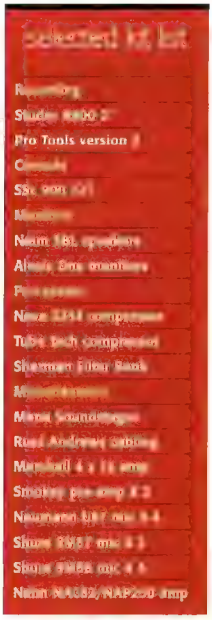
Keyboard player Mick Dale's vast array of vintage keys and amps were pressed into service.

"I walked into the control room one day and Tristin was just sitting there wearing this huge turban with bits of fruit hanging off it" **Mick Dale**

Bassist Steve Firth was given the Smokey mini-amp distortion treatment...

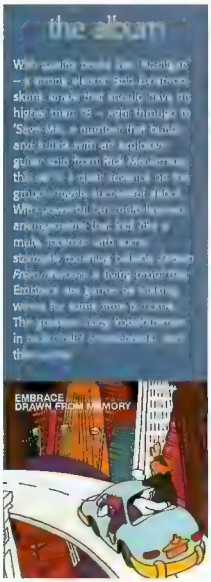


It was thanks to guitarist Nick McNamara that Tristin was able to solve the rotary speaker problem



"I knew we'd picked the right place ... and then, when he heard what the big Batsford lobby did to Danny ..."

"I was always fairly confident that I could get a pretty good sound with a guitar group like Embrace, if only we could get along" **Tristin**




» come up with a list of residential or location venues, 'locations' being shorthand for those audio-friendly spaces that can give a good sound for mobile recording. From the supplied list, they chose Batsford Manor, a vast rambling mansion in leafy Hertfordshire. Although hiring Batsford can cost thousands a week, the pile is worth some £3.2 million.

Tristin is convinced that the whole two-and-a-half months cost up to a third less than recording in some "hugely expensive city studio. Besides, when I'd heard what the big Batsford lobby did to vocals, and what the long corridors did to the guitar sound, I knew we'd picked the right place. Natural reverb, you can't beat it." This is something I can testify to myself, having been lucky enough to visit the Manor before the sessions ended. The sound was quite simply amazing, even if members of the group did occasionally have to duck the odd flying bat during the last day (it ain't called Batsford for nothing).

But pure sound alone often isn't enough, especially if people don't feel like recording. Luckily, the Manor proved to be inspirational on the vibe front as Tristin himself had hoped it would. "People had their own huge bedrooms, friends could come and stay occasionally without getting in the way and the games room was over 2,000 square feet. We had our own cook and if you wanted some space, outside you had hundreds of acres of green all around you in every direction. In the ballroom we got the whole band to jam and record together live for hours and hours, which they'd never really done before in a studio setting. Some really good songs came out of all that."

The improvisation didn't stop with the music jams. Steven Firth's bass was given the Smokey mini-amp distortion treatment, and when Tristin wanted to create his own Leslie rotary speaker sound he found it increasingly difficult until he used a novel solution: guitarist Rick McNamara spun a Shure SM57 mic around in front of his guitar amp, lasso style – which immediately worked (and can still be heard on 'I Had A Time', the album's penultimate cut). The Sherman Filter Bank got an awful lot of use too, adding texture to the album's more straightforward compositions. "The Sherman was so useful," Norwell recalls. "It can mash up signals until you can't even remember what the original preset was."

Tristin's own Pro Tools also came in handy, of course, but the final destination of the music was Studer's latest 2" A800, always running at 15 i.p.s. with Dolby A switched on (analogue being the choice of both band and co-producer). "The great thing with analogue is that you can record and re-record and it just gets better and better with that whole tape saturation thing."

After a little re-recording at Olympic Studios in London, mixing was done over a three-week period at the Strongroom's Studio One, and sometimes with playback in Tristin's own Studio 9. This is a small set-up using Pro Tools, an Akai 3200XL sampler, a Technics 1210-II deck and Alesis One monitors on Mana Soundstages alongside cherished gems such as a Moog Prodigy synth and Roland's RE 501 chorus-echo.

The album's first single sold over 50,000 copies in December 1999, and supported by the second single 'You're Not Alone' and a battery of gigs and webcasts, *Drawn From Memory* is expected to do even better. But would mega-producer success turn the man from down under upside down? Well, let's put it this way: Tristin Norwell's next lot of sessions isn't with a Nassau-based superstar, but with unsigned Bristol group Sticks and Stones. "They're a really good energetic band and they're guitar-based, which is quite daring these days when most new acts are dance-oriented. I think I can help them put down some really strong, original tracks." He may have clocked-up more air miles than Henry Kissinger but Norwell's feet remain firmly on the (control-room) floor.

Tristin Norwell: expert at ...

Photo: Gavin Roberts

# Log on

## www.soundcontrol.co.uk

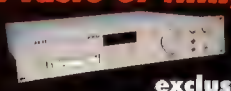
- News
- Reviews
- Features
- DEALS!

# SOUND CONTROL

THE UK'S NO 1 MUSIC RETAILER

*Request your **FREE** copy of "**Sound Control - The Magazine**" Online, or Call **Freephone 0800-52-52-60** to have your personal copy rushed to your door... Jam-Packed with the very best deals on offer...*

**A Taste of things to come...**



**AKAI S2000**

**exclusive price £399**

**Best Prices for Gibson in the UK**

**GUARANTEED**

*This is just a sample of the Deals we have on offer this month - request your copy of 'Sound Control - The Magazine' Now for more Deals on Offer*

Sound Control Direct. Jamaica Street, Glasgow. G1 4NN •Int: +44-141-204-2774 •Fax: 0141-226-5124

•**Freephone - 0800-52-52-60** •Email: direct@soundcontrol.co.uk •**www.soundcontrol.co.uk**

# Food for thought

words **Derek O'Sullivan**
photography **James Cumpsty**

## Cutmeisters DJ Food talk to *The Mix* about sampling, recording epic sounds and the art of minimalism

First of all, let's clear up a common misconception: DJ Food is not one person. The concept behind this frequently misconstrued nomenclature is the provision of musical 'food' and ideas for DJs, you see? Starting life as a pseudonym for Matt Black and Jonathan More, aka Coldcut, the DJ Food project began with the release of the *Jazz Brakes* series, a set of five albums that emerged between 1990 and 1994. *Jazz Brakes* collected together breaks, loops and samples that were ideally suited for mixing, but equally functional as tracks in their own right – the very essence and definition of DJ Food, in fact.

The latter two releases saw Patrick Carpenter, or PC as he was accredited, joining the flexible collective that had, by now, grown to incorporate input from the likes of Paul Brook, Paul Rabiger, Strictly Kev and Isaac Elliston. With the burgeoning success of Coldcut, however, Black and More opted to concentrate on this arm of their output, effectively handing over the DJ Food entity to PC and Strictly Kev, who subsequently released the first official album, 1995's beautifully executed *A Recipe For Disaster*. Confusing, huh?

Punctuated by the *Refried* Food remix albums, with the team tackling tracks from the likes of Ashley Beedle, Squarepusher, and The Herbaliser among others, the latest album proper from DJ Food has been some four years coming, accumulated and developed between assorted extra-curricular work. The resulting opus is the utterly stunning *Kaleidoscope*, a ground-breaking 12-tracker that takes the art of vinyl mixing, sampling and digital production to a new level.

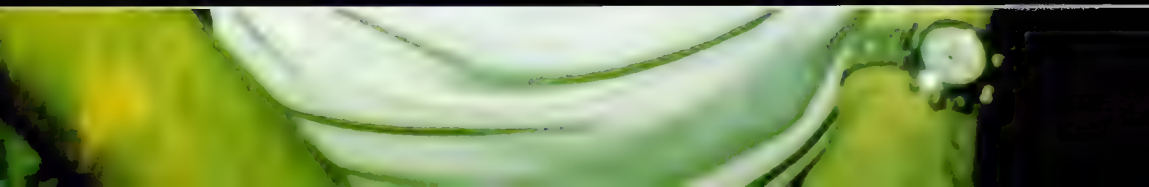
The basis of many of the tracks on *Kaleidoscope* come from ideas developed from samples, but it's important to stress (particularly to the more 'traditionally-minded' anti-sampling types out there) that what people like DJ Food do couldn't be further from the kind of plagiaristic sampling that we all know and hate. The extent to which an album such as *Kaleidoscope* has defined the real art of sampling as a cutting edge musical form can only be fully appreciated by listening to it. You will be aware, immediately, that this is a consummate body of work, incorporating the possibilities that new technology makes real with the kind of musicality that simply can't be reached through shortcuts. "We probably spent a couple of years on it from beginning to end," Kev concurs. "Although we were doing other things as well. I've been doing quite a lot of design work for Ninja, and Patrick fixes cars [no, really], and obviously DJing takes up a lot of our time."

It's rare to hear an album that genuinely leaves you pondering the question 'What the fuck..?' So how's it done? "A lot of the tracks start from a sample, or maybe a collection of samples that we'll go through," Kev suggests. "Initially, it's about selecting the ones that sound good and replacing the ones that don't. To most

DJ GEAR
DJ TECHNIQUE
DJ CULTURE

# XFADE

THE ULTIMATE
DJ MAGAZINE



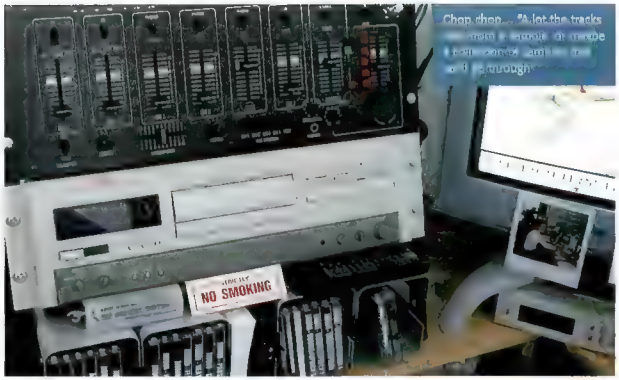
people, I suppose the stuff we use is obscure; they're only really obvious to people who know where they come from, which sounds like a dumb statement, but that's the reality of it. There's a sample on 'Nocturne', for example, which is from a film with Dudley Moore and Peter Cook. It's an amazing soundtrack, but again not the sort of thing that most people would know."

Collaborations are a large part of the DJ Food musical ethos, and those on *Kaleidoscope* are typically off the wall. The track 'Ageing Young Rebel', for instance, employs the spoken-word scat of '60s jazz poet Ken Nordine. Nordine's voice has graced everything from Levi's commercials to Grateful Dead albums, and he famously supplied sounds for the film *The Exorcist* as well as teaching its star, Linda Blair, to talk backwards for her role as the possessed young girl.

"We got involved with Ken after interviewing him on Solid Steel, the Coldcut radio station," Kev explains, "He was great to work with. Very laid back. But you get the impression that his work isn't really work; he's just constantly thinking – everything that comes into his head is a fresh idea. It must be quite a burden really.

"He actually told us that he used to memorise stuff to impress girls. He learnt the whole of Omar Khayam that way, apparently. He did an album called *Colours*, which is a collection of short pieces that were originally used as radio ads for different colours of paint. And *Word Jazz* is one to look out for – kind of a collection of short stories with loads of weird edits and echoes and delays. It's all really ahead of its time."

Production is paramount for DJ Food, but good production is as much about tricking the ears as caressing them, as Patrick elaborates: "A lot of people think that there's loads of live playing on the album, but again, it's really down to the choice of samples. It's obviously not music made with digital instruments, but digital technology has certainly defined the process by which the music is made.



Chop chop... "A lot the tracks [illegible] through"

"The layering is quite intense, and if you balance small sounds with big sounds, the big ones sound huge. Then when you start defining them with different effects and reverbs, you begin to get that epic kind of feel." Kev expands the explanation: "I do as much of my stuff in stereo, and it's all done in audio on Cubase. There's very little in mono unless the original sample is mono, and even then, I'll work on the stereo imaging, because I've got the capacity to do that with the software. I could show you one of my arrangement pages, and it's just 12-15 tracks of stereo, with stuff all over the place, and then when you go into every audio block, it's like chop, chop, chop – a lot of cut-ups.

> "It's not music made with digital instruments, but digital technology has certainly defined the process by which the music is made"

"This is the first stuff that I've worked on by myself, so it was like a learning process for me as well, which meant that I really delved into what I could do. Patrick works with Atari and Notator, so a lot of his stuff we bring over to Cubase VST when it's in a more completed form to edit, EQ and tidy up – all the

## Know thy gear

[illegible] by their ancillary [illegible] effective and open to [illegible] "You need to get the best out of what you've got. We're very much into [illegible] and [illegible] sometimes [illegible] a different [illegible] there's a point [illegible] generally have a clear idea of [illegible] and [illegible] and [illegible] where it works."

Naturally, the turntables are viewed as an essential, instrumental entity, not simply as a medium for recorded matter. "We try to improvise with the decks and the records, as much as just playing vinyl," Patrick explains. "I have a selection of records that are tools – solo instrument records or whatever, and a delay unit, which helps, than a bunch of old jazz stuff. Kev has selected records as well, and we kind of get familiar with what we have and develop it.

"We bring freeform passages into our DJ sets, so that we can break everything down from the beats into percussive parts and ambient sections, where the audience doesn't know where it's going and, in a sense, we don't necessarily know where it's going. It's about finding the elements that work together to bring you back into something that's entirely different."

The latest DJ Food release takes the art of vinyl mixing to another level

Resident mixer: the Mackie 1402 VLZ takes its place in Kev's studio

Kev and PC believe in knowing their gear inside out, rather than overloading their studio with kit...

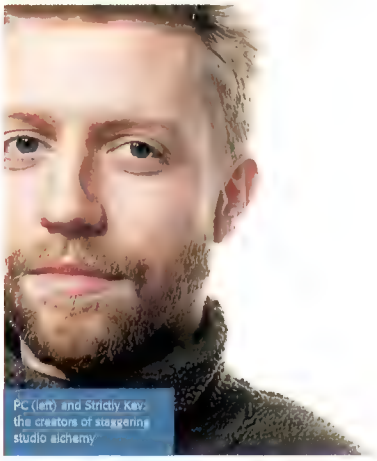
kind of post-production, really. With a track like 'Cookin', Patrick put it all on 8-track tape live from a jam with synths and guitars, then we chucked it all into my machine and it was heavily edited, re-sequenced, overlaid and mixed. "We use an engineer called Ali Tod as well, who knows the gear and knows us and our sound – he worked on 'Cookin'."

'Break', a staggering piece of studio alchemy, employs a technique first used by Patrick on a David Byrne remix, as he reveals: "'Break' used a vocal from a record called 'The Hustler's Convention' – a part where he talks about a pool match. What I did was sample the vocal and break it up into syllables, then assign them to different keys on the keyboard. You get the effect of a percussion instrument from a voice, which is punctuated with drum sounds." Added to this are some meticulously structured cut-ups of a pool break, alongside countless mind-boggling pitch shifts, pans and assorted sequencer trickery, prompting a discerning musician friend of mine to comment, tellingly, that: "They sound like they can smoke a lot more puff than me". And believe me, if you knew the man, you'd fully appreciate the gravity of such a compliment.

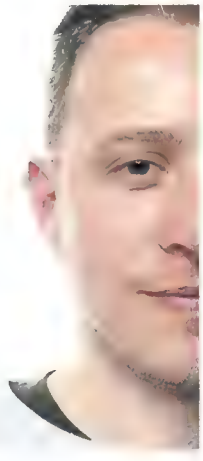
And what inspires such studio dexterity? Along with innumerable records culled from everywhere and anywhere, Patrick's current tastes speak volumes: "I like the production on speed garage records – short, sharp sounds and very punchy records. And Debussy. And Tom Jenkinson." 'Nuff said. Miss this album at your peril.

**Selected kit list**

Cubase
Mackie 1402 VLZ
Mackie LM1604
Recording
Macintosh G3 running Cubase VST v.4 and Peak 1.6 and 2.01
Akai 1000XL and Creative
Korg 221 I/O soundcard
4Gb AV drive
Fostex M80
Fostex DX 8M
Monitors
Spirit Absolute 2
Sound generators
Technics 1210 x 2
Akai S5000/6
Korg Prophecy
Boss CS-3 compressor
DJ equipment
Vestax 06 Pro mixer
Vestax DMC155i



PC (left) and Strictly Kev: the creators of staggering studio alchemy



# LOGIC AUDIO SERIES

## Advanced Music Production Software

emagic

Emagic MIDI Interfaces - AMT8 and Unitor MK2. Both feature 8 x 8 USB & Serial connections as standard and Active MIDI Transmission timing technology. Unitor 8 Mk2 also features SMPTE and VITC synchronisation.
**COMING SOON! - Emagic MT4 2 in 4 out USB Interface**

Logic Audio v4.1 now supports all VST2.0 format virtual instruments, full support for ReWire and support for our own high quality virtual analogue synth - the Emagic ES-1.

Introducing the Emagic EXS-24 Xtreme Sampler 24 Bit - the first software sampler to be perfectly integrated into the internal mixer of a digital audio sequencer. Features include up to 32 Voices per EXS24, Sample Accurate Timing, Easy-to-use Graphic Interface, Full Automation, Seamless Integration with Logic and all effects in Logic's internal digital mixer, plus simultaneous use of up to 16 EXS24 plug-ins per song!

More commercially available tracks are produced using Logic Audio than any other sequencer. Adding extreme sample power to Logic Audio further enhances its power and position as the software sequencer of choice.

Logic Audio v4.2 for Windows 98 and Mac OS is a free of charge update for all 4.0 and 4.1 owners with features including sample accurate synchronisation, Roland VS Support, Emagic Autofilter and Tape Delay Plugins for TDM (Platinum Mac only), new Time Signature and Key Change Editor, support for the Emagic EXS-24 Sampler plus much more.

**For more Emagic information please call Sound Technology on 01462 480000 or visit www.soundtech.co.uk**

...artlow Ltd. SAE, Nuendo, Logic, Emagic, ® is a registered trademark of Steinberg Media Technologies GmbH. All other trademarks are property of their respective owners.

# pc toolbox

## News from the industry, advice, tips and software for PC users, compiled by *Ian Waugh*

### NEWS

### Gates steps down

The big news at Microsoft, as we go to press, is that Bill Gates has stepped down as CEO. He has handed over to Steve Ballmer who will now have the responsibility of running the company on a day-to-day basis. Gates becomes chairman and chief software architect, a move, he says, which will allow him to get back to what he loves the most – software technology.

The cynical may say that this is in response to the continuing bad press Microsoft has attracted in the DOJ case (in which Microsoft has been accused of engaging in anti-competitive practices), and by stepping down, Gates hopes to remove some of the heat. Others may suggest that there are several instances where Gates has not made sound business decisions and wonder if he's passed his sell-by date.

Other industry watchers point out that Ballmer has been running Microsoft for years anyway, with Gates acting more as innovator. This train of thought suggests that there will be little change.

Interestingly, Microsoft have just settled their anti-trust lawsuit with Caldera out of court for an undisclosed sum. In 1996 Caldera claimed Microsoft had discouraged customers from buying Caldera's DR-DOS. Microsoft's bid to have the case thrown out of court failed.

### Net gains – or losses...

The big news for net users is the merger of Time Warner and AOL. It brings together two giant companies, one with entertainment skills and around 20 million cable subscribers, the other with online expertise, also with around 20 million subscribers. Isn't that a useful combination? Valued at $190 billion, it's the largest merger the US has seen. AOL gets access to cable; Time Warner plugs straight into a formidable amount of internet expertise.

The merger could herald the integration of all major media: movies, music, TV and the internet. But those who worry about such things are concerned that the leviathan will attempt to wield more control than the denizens of freedom would like. There are privacy concerns as the company has a massive database of members' tastes and preferences in entertainment, books, music and videos. There are also worries that a company as large as this could impose their own music file formats, restricting user choice. At the moment, we simply have to wait and see but Time Warner's link with EMI could also prove ominous for music lovers...

### EMI's bandwagon

If ever an industry resembled a headless chicken it's the music biz, and record companies in particular. If we ignore the ostrich syndrome a few years ago, when they tried to ignore the internet, they have since tried all manner of heavy-handed tactics to prevent the distribution of music over the internet. They've finally realised that they're not going to beat it so they might as well join it. Or, more to the point, try to control it.

Towards that end, EMI and Time Warner have merged their music businesses to create a behemoth that will control around 20% of the world market with, of course, a massive presence on the internet. Again, the worry is that such a corporate presence and control will continue to keep the price of music artificially high. CDs continue to be overpriced (anyone think they're not?) and the report released a year or two back, which said so, seems to have been conveniently forgotten... or ignored.

Of course, this could be the best thing for music and music lovers since the invention of the gramophone. But we're not placing any bets on whether it'll be the consumer or big business who is the winner.

### MP3.com beamed down

Yet another example of music business paranoia is evidenced by the RIAA (Recording Industry Association of America) filing a case against MP3.com for copyright infringement with their Instant Listening and Beam-It services. These enable the owner of a CD to play music from a range of MP3 files that MP3.com has already converted on its website.

The RIAA claim the issue is about copyright. MP3.com claim 't's about consumers' rights to listen to music they have already bought in a format which is convenient for them. They claim that the RIAA want to control the content even after it has been bought.

***If you want to check out the details, log onto www.my.mp3.com – if the site's still there***

### All this and Acid 2

Sonic Foundry's Acid seems to be the DX7 of the '90s. Just as every musician on the planet was rumoured to have a DX7 (a seminal digital synth by Yamaha, in case you're under 17), so every musician with a PC must, at

### CD info

**track 01**
Check out a demo of Acid Pro 2, the latest version of Sonic Foundry's fun-to-use sample looping software

the very least, have tried a demo version of Acid. Even if you're not into samples and loops, it's a fun program and it's easy to while away a day or three just fiddling about with it.

The essence of its success is that the one program lets you easily do what would otherwise require a sampler, a sequencer and a lot of fiddling. The general idea is that you load sample loops into it – any loops at all – and it adjusts the tempo and pitch so they all play in tune and in time. You can quickly transpose the entire song and change the tempo, something that you would mess around with for an afternoon if you were using a hardware sampler.

Operation is dead easy. The lower part of the program is used to navigate your way around your hard disk or CD drive to find audio files. These are assigned to a track and can then be drawn into the display by clicking and dragging while Acid automatically matches the pitch and tempo.

Now, here we are with Acid Pro 2 with more bells and whistles. Actually, it has more bells than whistles, because the basic layout, format and modus operandi remain the same. The bells come in the form of Sonic Foundry's XFX 1 plug-in pack, which includes reverb, time compress/expand, multi-tap delay, chorus, pitch shift and echo. The program supports DirectX plug-ins so you can also access any others you may have.

Another bell is Sound Forge XP, which is included in the pack. It's a rather light version of Sonic Foundry's Sound Forge audio editor. It doesn't have all the facilities of its big brother but it's fine for editing and it includes a range of processing features such as DC offset, EQ, normalise, reverse, smooth/enhance, time compress/expand and fade, plus effects like chorus, delay, distortion, dynamics, flange and pitch bend. Lots of useful functions if you don't have the biggy.

Acid Pro 2 supports 24-bit audio files in preparation for the day when 24-bit soundcards are the norm, and it can save files in MP3, Windows .ASF and RealMedia formats, ready for dumping onto the internet. The program also contains a wizard to guide you through the stages involved in publishing your music on the ACIDplanet.com website.

New too, is the ability to burn a CD directly from the program. Dedicated audiophiles, however, will probably want to export songs and tweak a few settings before assembling then into an album.

One of the most common gripes among Acid users is that the program cannot calculate the root note of a loop. It needs this in order to perform its magic correctly. This information is now included on many sample loop CDs, which is jolly useful. However, if it's not, you have to find the pitch by ear, which isn't everyone's forte.

So, Acid Pro 2 has lots of nice extras and if you haven't yet got a copy, maybe now is a good time to try it. You can download an installation program from the company's website (www.sonicfoundry.com) and it's included on the cover CD. Be aware that it requires you to log onto the site or to contact Sonic Foundry in order to get an activation number. In other words, the Foundry wants to know who is using the demos.

***Acid Pro 2 costs £249. More from SCV London on 020 7923 1892***

## K4 in a box

If you cast your mind back to the halcyon days of the digital synthesizer, you may recall that among the Yamaha DXs and Casio CZs there were also Kawai Ks. One of the favourite little synths from that era was the Kawai K4, which had a big sound for the money and was rather easier to program than some of the other digital doobries. It had four oscillators, each of which could be assigned a digital cyclic waveform and then processed in various combinations.

Now here we have the Virtual Kawai K4 in a rather bland – but functional – interface. It has four oscillators, each of which can be assigned one of 96 digital cyclic waveforms that are then passed through a filter and then to reverb and chorus effects. There are three modes. Normal mode uses two oscillators that are passed through one filter. Twin mode is where two oscillators are paired and each pair sent to a filter, and double mode is where all four oscillators are grouped and sent to a filter.

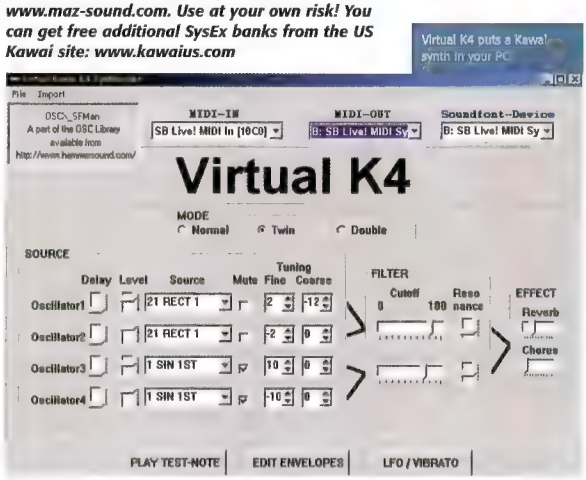
Each of the four waveforms are loaded into SoundFont bank numbers 1 to 4 so you need a SoundBlaster card or a card that supports SoundFonts in order to use the program.

Other features include an envelope screen where you can adjust ADSR parameters for each oscillator and the two filters. There's also an LFO/vibrato screen where modulation can be routed to the filter.

But undoubtedly the program's major feature is the ability to load K4 SysEx data and convert it to a sound. It uses a standard K4 SysEx dump file and selecting one opens a window listing the sounds therein, which can be transferred to the virtual synth.

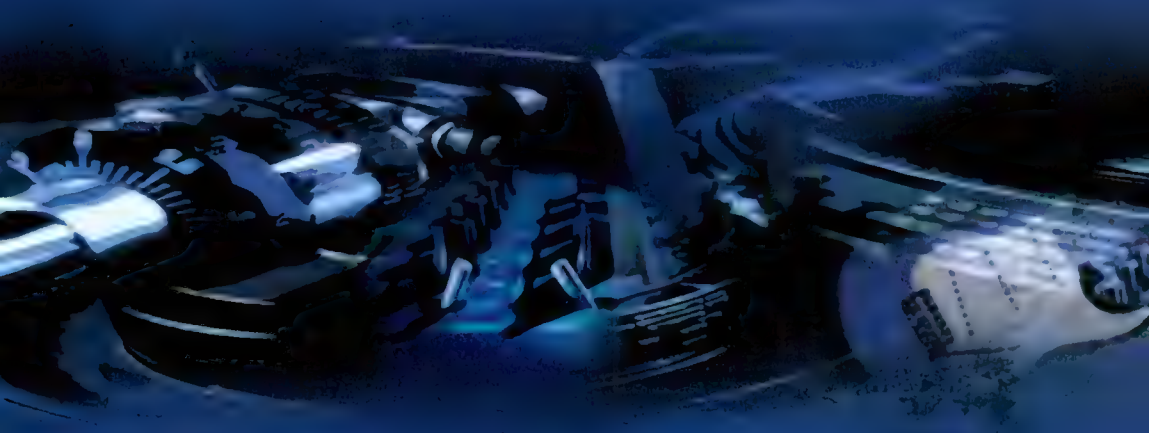
Alas, the program doesn't support multi-timbral operation, but it is still a test release. If you're a lapsed K4 owner or simply want to play with an easy-to-use digital synth emulation, this will make a rainy afternoon pass by in no time at all.

***A beta version of the virtual K4 program can be downloaded from the soft synths section at www.maz-sound.com. Use at your own risk! You can get free additional SysEx banks from the US Kawai site: www.kawaius.com***



# intermusic.com

## everything you need to make music



**intermusic.com** is the new network of great websites for anyone who wants to make music.

Looking for impartial, well-informed buying advice? **intermusic.com** has thousands of gear reviews, from retro synths to the latest guitars, written by professionals, and all searchable by model and manufacturer. And our unique reader reviews let real-world users rate and review the gear too.

After the latest software? **musicshareware.com** has a vast archive of programs to download, from guitar tuners to MP3 rippers, with new files added daily. Need some new sounds for your music? **samplenet.co.uk** has thousands of copyright-free samples for you to preview and download.

You ll find tutorials and advice on every aspect of music making, from stringing a guitar to setting up a DJ turntable. Plus star interviews, free music downloads, daily news and comment, webcasts, competitions and much, much more. In fact everything you need to make music. So if you want to get into music online, get into **intermusic.com**.

**www.intermusic.com**

From the makers of: XFADE, Bassist, Rhythm, The Mix, Future Music, Computer Music, Total Guitar, Guitarist and Guitar Techniques

# mac toolbox

## Industry news, tips, advice, and software for Mac users, compiled by *Ian Waugh*

NEWS

### Mac music in jeopardy

In these pages in issue 72, we told the sad and sorry tale of how Gibson bought Opcode, closed them down and sacked their employees, and of the company's seeming intent to bury Opcode software, including OMS (Open Music System).

If you use Mac music software, the chances are that you have OMS on your machine. It enables software to communicate with MIDI interfaces, allows sounds to be selected by name rather than number and provides a routing system to transfer MIDI data between different pieces of music software running on the same Mac, such as a sequencer and a soft synth. Many manufacturers have hardware products that rely on OMS too. In fact, OMS is pretty damn near an essential part of any music system running on the Mac.

Although Opcode hold the rights to OMS, it was made freely available to all users and – more to the point – it was updated regularly to maintain compatibility with Mac OS updates and other software issues. In particular, OMS will apparently need updating to provide compatibility with Apple's new OS X. If this doesn't happen, it could force developers to look for a new standard, and what a nightmare that would be.

The situation for the 20,000 users of Opcode software is potentially even worse. According to user reports, technical support under Gibson is patchy at best and they live with the constant threat that copy-protection systems may not be supported. If a hard disk install goes wrong, will Gibson supply a replacement? If users who opted for the challenge/response system (essential on Macs with no floppy drive) change computers, they will need a new response code. Will Gibson supply it?

According to the grapevine, Gibson have already been made an offer for Opcode but the CEO is holding out for more money. You can read more about Gibson's oppressive tactics at: www.flash.net/~sgoldin/summary.html. Gibson have yet to make any public statement regarding OMS, other Opcode software or their plans for supporting existing users. The music fraternity are understandably concerned and are asking Gibson to release the OMS code to the open-source development community so it can continue to be updated. To that end there is an online petition that you can sign and, as of writing, it has already been signed by over 150 manufacturers (including Mark of the Unicorn, who developed the alternative FreeMIDI system) and over 3,000 users. Many attendees at this year's NAMM show (yet to take place at the time of writing) will be sporting 'Save OMS' t-shirts. If we have any late-breaking news it will be in our *News* pages.

***Log onto: www.saveoms.org for more information and to sign the petition***

### iTools for the job

If you want to keep up to date with new developments at Apple, it's worth paying regular visits to Apple's website: www.apple.com. If you haven't been there recently, you might enjoy the new layout, which uses tabs rather than hotlinks to access the various areas. It looks neater but it's still just as painfully slow for folks with a modest 56K modem.

One of the new things is iTools, a suite of utilities for use with the internet. They include KidSafe, a free email account, 20Mb of storage space on Apple's internet servers, and homepage hosting. You need OS 9 and are supposed to be resident in the US. However, we understand that this slight oversight on Apple's behalf can be corrected if you simply give »

# make music now

"With Macs and PCs now powerful enough to do 'virtually' anything in a traditional recording studio, there are millions of potential musicians out there. *Computer Music* is the magazine that they, and existing hi-tech musicians, have been waiting for..."

## Computer Music Subscription Offer

**6 issues for only £19.95***

Save up to 33% off the cover price ■ Each issue delivered free to your door* *UK only

Title (Mr/Mrs/Ms/Miss)..... Initials..... Surname .....

Address .....

Postcode ..... Country..... Daytime telephone.....

UK cheque/credit card..... £19.95 Europe (inc. Eire)..... £35.95 Rest of World ..... £49.95

I would like to pay by ☐ Cheque (payable to Future Publishing) (Sterling cheques drawn on UK account only)

☐ Visa ☐ MasterCard Card number..... Expiry date.....

☐ Switch Issue No..... Valid ..... Date..... Signature.....

Subscriptions will start from the next available issue, please telephone for details Order Code: CMUHSE99
(UK) Return to: Computer Music Subscriptions, Future Publishing Ltd, FREEPOST BS4900, Somerton, Somerset TA11 6BR
(Europe/RoW: Computer Music Subscriptions, Future Publishing Ltd, Cary Court, Somerton, Somerset, UK TA11 6TB

☐ Please tick if you do not wish to receive information on other offers

**Order Hotline: 01458 271157**

Please call this number for all orders and enquiries or email
**subs@futurenet.co.uk**

## Every month in Computer Music

### Tutorials
We give you the software you need to make great music, and tell you exactly how to use it.

### Reviews
Our team of expert reviewers offer informed, unbiased opinions on all the latest kit.

### CD-ROM
Hundreds of samples, the best demos, and the most useful shareware. It's all here!

**www.computermusic.co.uk**

your address as being in the US of A. There is no definite indication if iTools will ever come to Europe. It seems we're second-class citizens again.

## Generation X

After being on the cards for well over a year now, the new generation of Apple's operating system, OS X is scheduled for release sometime this summer – although it may take a little while longer to make it to the UK. Here's a few selected highlights about it to get you salivating.

The first thing you notice is the new user interface, called Aqua, which is suitably sleek and shiny. The core of the OS is Darwin (next generation, geddit?) and it includes a feature called Protected Memory, that gives each application its own memory area so if one app crashes it doesn't take down the whole machine. That really will be nice. It also has a virtual memory handler which allocates the exact amount of memory that each application needs. It supports pre-emptive multi-tasking which enables the Mac to perform several tasks at the same time, allocating resources to each app on a priority basis. How this might work with music applications where timing is critical remains to be seen.

The new features in Darwin appear to be quite extensive and Apple plan to ease in the transition between OS 9 and OS X over a 12 month period. To help with this there will be three application environments called Classic, Carbon and Cocoa. Classic will run all existing Mac applications as they run under OS 9. Carbon applications will be optimised to run under OS X and will be able to take advantage of features such as protected memory and pre-emptive multi-tasking. Cocoa is the new bit, an advanced object-oriented programming environment, which gives developers more tools for producing more snazzy, zippy and zappy applications.

## OS 9 update

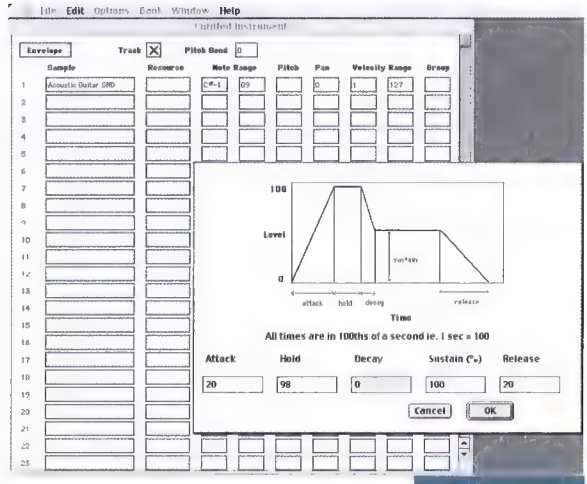
Even though OS 9 is barely out of its nappies, one or two issues inevitably arise that need addressing, and that means updates. If you're using OS 9, keep your eye on: www.apple.com/swupdates.

The last time we looked; there were over a dozen updates there including an audio update. This is to correct a problem with Audio Extension 1.0.1, which is installed with the OS 9 audio update 1.2 and can cause a crash when the computer is put into sleep mode or shut down. It's worth paying regular visits to the update area to ensure your system has all the latest bits and pieces and to keep on top of the potential problems.

## VSamp

Here's an interesting program that can turn your Mac into a 16-part multi-timbral sampler. It doesn't need the latest greatest G3 or G4 machine either, and will run on an older Mac with a 68020, 030 or 040 processor (although not the MacPlus, SE or Powerbook 100).

VSamp's basic modus operandi is pretty simple and if you've used a sampler you'll already be well acquainted. The basic unit is the sample which can be an AIFF, SD II or SND file. The organisation of several samples (say a set of multi-sampled piano sounds, across a key range) is an instrument and up to 64 samples can be used in an instrument. Each sample has parameters for setting its upper and lower note ranges, base pitch, pan position and velocity range.




With VSamp, an instrument can contain up to 64 samples and you can create an AHDSR envelope for it.

There is an envelope window where attack, hold, decay, sustain and release parameters can be set for the instrument. Each instrument can play the samples at their default pitch rather than transpose them by MIDI note, which you'd probably want to do when creating a drum instrument. There is also a mute group feature, which makes the currently triggered sample mute any samples that are playing in its group.

The bank window can contain up to 16 instruments, each of which can be assigned its own MIDI channel. There is a pitch-bend setting and an option to use a high-quality transpose function which produces a better quality output when the sample is transposed. The tradeoff is reduced polyphony, but this should not be a problem with faster Macs.

You can play VSamp from an attached MIDI keyboard or from a sequencer running on the same Mac. To do this, the program uses a utility called OMS Thru where you select an input (the MIDI input connected to the keyboard, for example) and an output – which will be VSamp. When running VSamp with Cubase, VSamp entries automatically appear in Cubase's track output columns.

Performance is largely dictated by CPU power, although even a modest Mac ought to achieve good results. A PowerMac 7200/90 for example, manages 16-note polyphony at 16-bit 44.1kHz without using the hi-quality setting, and 9-note polyphony with hi quality switched in. A 7600/132 using a PowerPC 604e processor manages thirty two notes at hi-quality.

VSamp is shareware and registration costs $25. Until the program is registered, a bank will stop playing four minutes after it has been loaded, although you can load it again and continue.

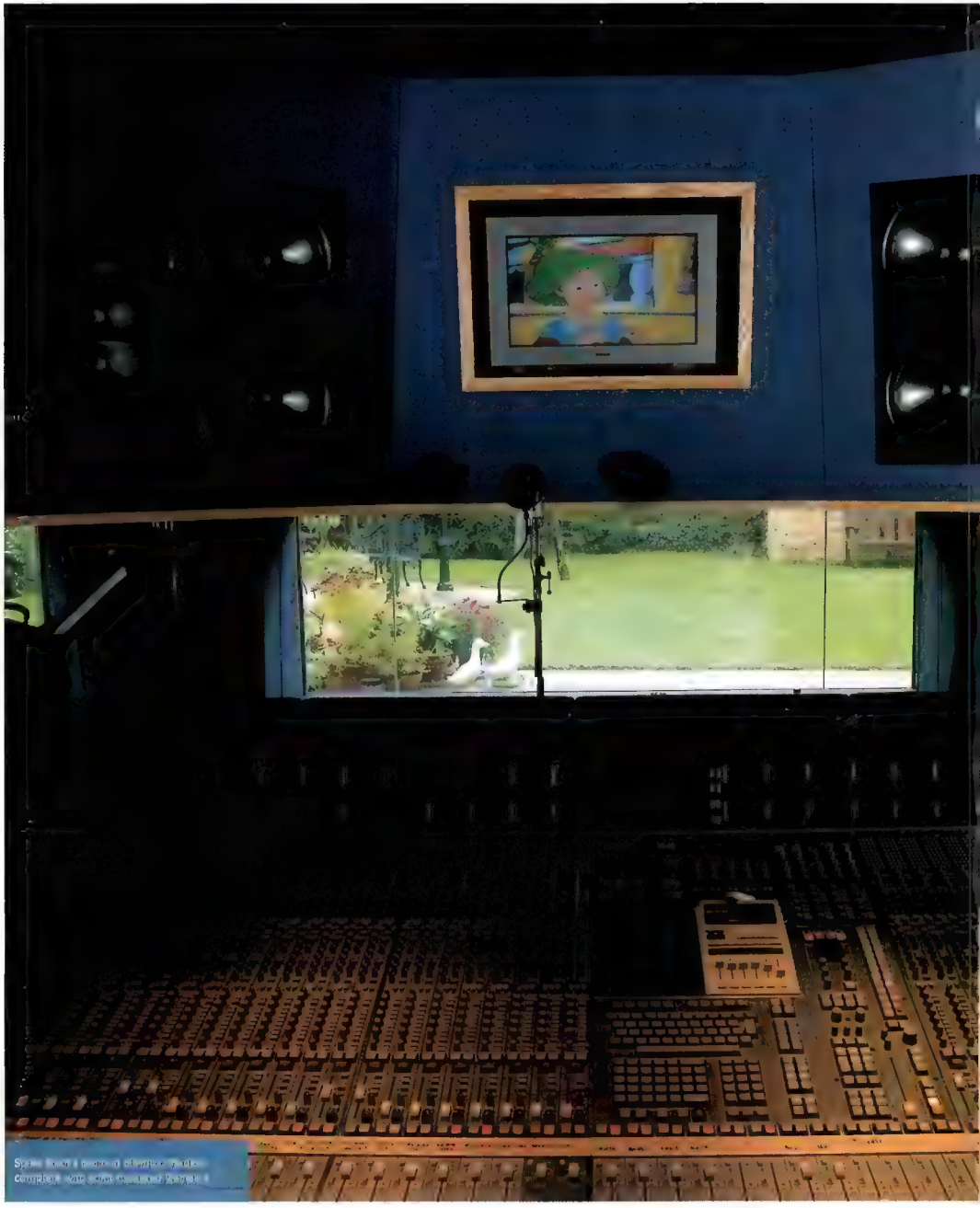
***VSamp is on this month's CD, or you can download it from: www.kagi.com/smaug/vsamp***

### QuickTime 4.1

Apple have released QuickTime 4.1 (available for both Mac and PC) that contains some neat new features such as support for VBR (Variable Bit Rate) MP3 files, options for embedding movies as a track within other movies, enhanced JavaScript support and AppleScript support (this only on the Mac, of course), it also has improved navigation through firewalls for all you folks who stream QuickTime movies while at work. It also has authentication features offering access to pay-as-you-view sites. You can read more about it, and download it from www.apple.com/quicktime/download/.

### CD info

**track 01**
If you fancy the idea of turning your Mac into a 16-part multi-timbral sampler, load up VSamp and you're away



part three

# Hear no evil

## So you want a big ol' control room with flush-mounted monitors, do you? This month we look at some of the problems you may face

words **Chris Kempster**

This month, we're going to look at some issues that are particularly pertinent to larger control rooms, but don't stop reading if you're sat at home in your toilet-sized project studio because these are principles that you should be aware of whatever the size of your room. But first let's recap, in brief, on the points we covered last time…

### 4. +6dB bass boost at boundaries

When a speaker is placed at a boundary, there's a boost in the energy radiating into the room, and this is only apparent with frequencies below 200Hz. For every boundary, the theoretical boost is +6dB, so if you place your speaker in a corner, there will be an 18dB boost in low frequencies (the three boundaries being the two walls and the floor). This can be corrected by either adjusting the response of the speaker (cutting the bass by a theoretical 18dB, in this case), or placing the speakers far enough away from boundaries (2m) to cancel out the effect.

### 5. Frequency cancellation caused by wall reflections

Reflections from the front wall can cause cancellation of particular frequencies. The reason for this is that when the distance between the speaker and wall is 1/4 wavelength of a frequency, the resulting reflection from the wall will be in antiphase and therefore cause some attenuation in that particular frequency (though not complete cancellation, since some sound will be absorbed at the wall). The solution to this is to either place the speaker close to the wall (or ideally, flush-mounted – see later), so that the cancellation frequency is very high (and therefore not a problem), or well away from the wall so that the cancellation frequency is very low. Remember, though, that when placing the speaker close to the wall, or flush-mounting, its response needs to be altered to counter the boundary boost effect (see previous point).

### 6. Sub positioning

Experimentation is the name of the game with subwoofers, and trying different positions will quickly reveal whether there are frequencies 'missing' or not. Place the unit either facing into the room, or facing the floor, with the unit angled off-centre if facing the room. Place 3m from the walls, if your room is big enough, and take 6dB off the response to take into effect the boundary effect (in this case, just the floor). In a smaller room, place the unit between 20cm and 80cm from the wall(s), and again, adjust the response to take into account the effect of the boundaries.

### Big rooms

If you've read the first two parts of this series, then by now it must be apparent that there are major advantages that a large, purpose-designed control room has to offer. But there are also potential

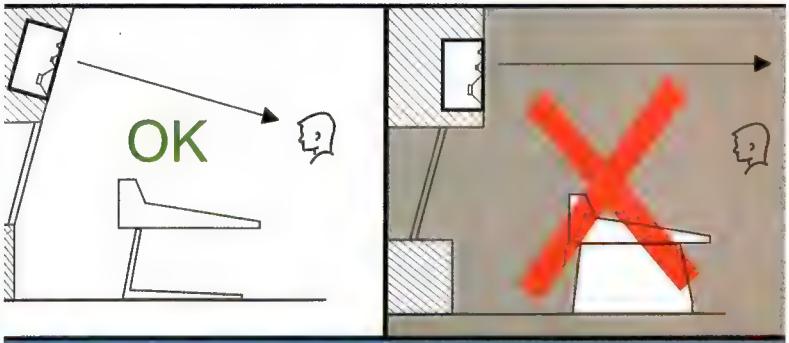



Fig 1: It's amazing how many 'pro' studios soffit-mount their monitors incorrectly, thus [illegible]

# THE WORLD'S FIRST REVIEW OF KORG'S MS2000 ANALOGUE SYNTH

## plus the chance to win a sampler *and* a record deal in our remix contest

**www.futuremusic.co.uk** FUTURE MUSIC

problems that, if not corrected, can render an apparently top-flight studio control room into nothing better than a spare room in your semi-detached house in Tonbridge Wells. Let's take a look at them, shall we?

## 7. Correct flush mounting

Walk into any big studio and the chances are there'll be a whacking great pair of speakers built into the wall in front of the mixing console, dominating the entire room. Flush-mounting (or soffit-mounting) the speakers in this way has its advantages over free-standing monitors, notably that there are no reflections from the front wall to worry about, and therefore no cancellation of frequencies. The stereo imaging is also improved since the diffraction at the edges of a rectangular enclosure (i.e a free-standing speaker) is avoided.

Since flush-mounting means that the speaker is radiating into a half space, the LF response needs to be cut by at least 6dB. Only one boundary comes into play here, since the units would be far enough away from the floor and ceiling. Isolating the speakers from the wall they are mounted in is also crucially important, otherwise the wall can behave like a large diaphragm. The standard solution is to have an isolating space of around 40mm in every direction around the speaker, with vibration isolators (with resonant frequency of 5-8Hz) fitted in between to de-couple them from the soffit. The wall itself should be as high a mass as possible.

As ever, you should consult the manufacturer about any specific advice. It's also critical to make sure that the speakers are positioned correctly i.e. angled down towards the sweetspot where the engineers are positioned (see part one of this series). You'd be amazed how many so-called top-flight studios make basic errors like this.

## 8. Avoid large reflective surfaces

We've already discussed how a very dead room can be oppressive to work in, and can also require a lot of power to generate the high SPLs that most people like to work with. This is why LEDE (live end, dead end) designs and variations of this are generally favoured in studios these days. However, without damping, reflections do become a problem, especially when you have large reflective surfaces such as a brick or concrete wall, and even the glass screen between control room and studio area.

The problems caused by reflections manifest themselves as 'colouration' – i.e. the interference caused when two waves of the same frequency meet and either cause summation, or cancellation. With the LEDE approach, damping is used at the speaker end of the studio, with less use of absorptive materials at the other (live) end. This should mean that mainly direct sound reaches the ears of the engineers in the initial radiation period, and that reflections from the back of the room are not heard as direct sound. This is an effective approach, especially when using nearfields.

However, damping of some kind would still be used in the rest of the control room, though this would only be effective in reducing the reflection of higher frequencies. It's the low frequencies, as ever, that are most difficult to control, since you need a

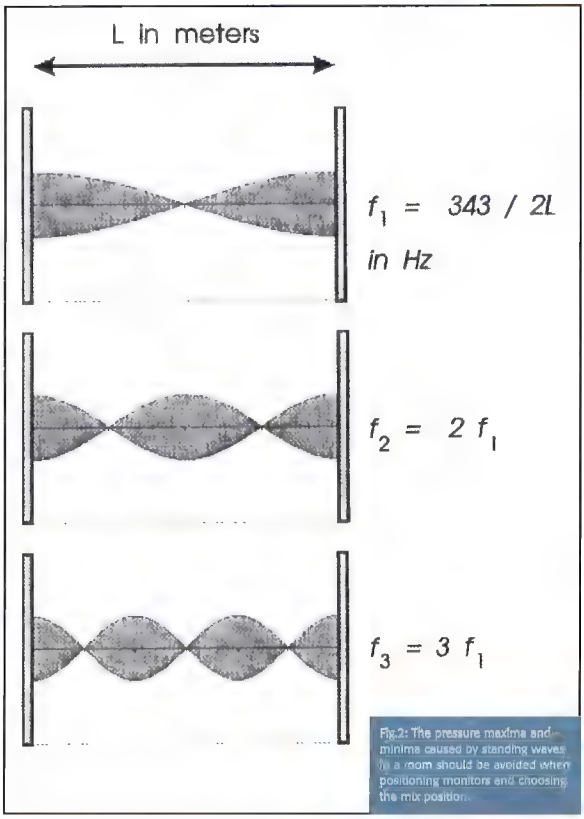



Fig.2: The pressure maxima and minima caused by standing waves in a room should be avoided when positioning monitors and choosing the mix position.

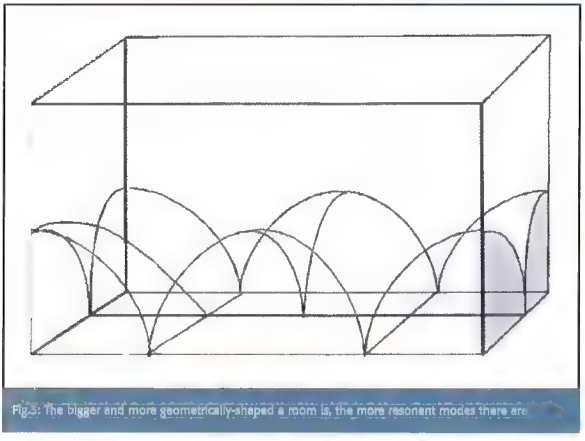
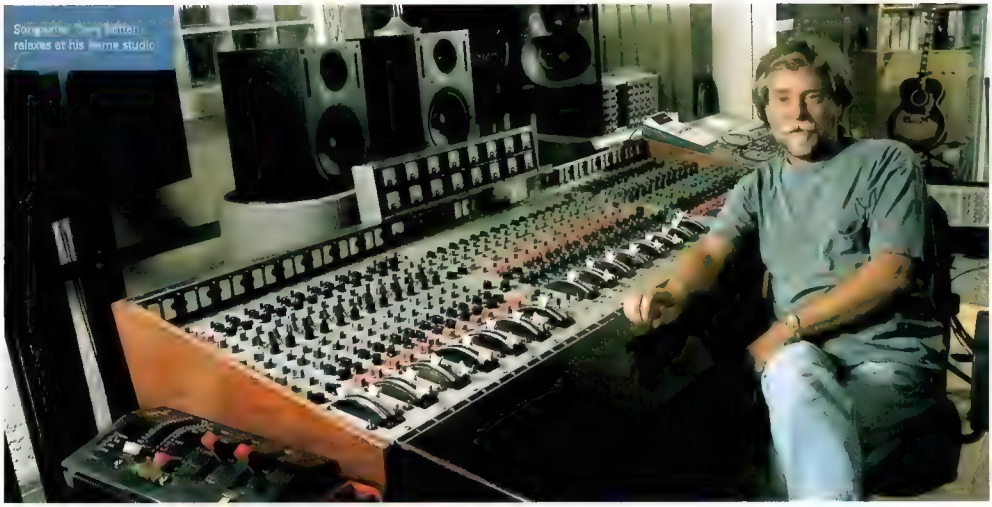


Fig.3: The bigger and more geometrically-shaped a room is, the more resonant modes there are.




great thickness of absorptive material to dampen out these low frequencies. The rule is that the layer of absorption needs to be 1/4 of the wavelength you want to damp, so for a frequency of 50Hz, for example, you need a thickness of over 1.7 metres. The type of material that you use also effects the level of absorption. So your egg boxes aren't gonna be much good for that, eh?

In practice, there are several simple points to bear in mind. If reflections from your nearfields off your mixer are a problem (you may experience a 6-7dB cancellation at 1-2kHz), move them higher up. Likewise with full-range monitors, make sure they are high enough up, and this will also minimise the 200-300Hz floor reflection effect. Windows between the control and studio rooms should be as small as practically possible, and symmetrical in the room. Tables or other reflective objects in the control room should be as small as possible (especially when between the monitors and listening position) and again should be positioned symmetrically.

## 9. Parallel walls = bad

Many modern studios are designed using complex geometric shapes that don't feature parallel walls. This is to avoid problems caused by parallel-piped rooms (parallel pairs of surfaces; the floor and ceiling, front and back walls, and side walls). Obviously unless you are building a control room from scratch, or are able to significantly modify your room, then you'll have to make the best of your situation. However, if you do have a choice of room (in your house, for example) it's worth noting that a cubic room is the worse case scenario, where the length, height and width are identical. You should also try to avoid any precise integer ratios between the proportions, for example, when the length/width ratio is 3:2. So if you have a choice, try to choose a funny-shaped room, and look for the best area for your mix position and monitors.

### More info

Check out the Genelec
Also, for a bit of bedtime
*Handbook of Acoustics*

To explain the reason for the problems caused by parallel walls, we need to delve into the world of resonant modes and standing waves…

## 10. Standing waves

Every room has a set of resonant frequencies, and these depend on the geometry of the room and its surface materials. The larger the room, the more resonant modes there are, and the more complex the shape is, the more densely they are grouped. For our worst-case scenario (the small, cubed room), there are only a few resonant modes, and these are spaced widely apart (in the frequency range). Just changing the shape of the room will increase the number of modes, and give a denser grouping with a lower bottom mode. Keeping these good proportions, but increasing the room size, gives even more modes with a more even distribution and lower lowest mode.

The importance of these modes is that they can cause peaks and troughs in sound pressure around the room (see Fig.3). When there are more, and more densely packed, modes in a room, the effects of these pressure maxima and mimima are less apparent. Therefore it is preferable to have a larger, geometrically-shaped room as your control room.

What does this mean in practice? Well, particularly in small rooms where there are few resonant modes, colouration of the sound can be quite marked. Don't ever put speakers halfway between boundaries (i.e. the midpoint between floor and ceiling), as there will be a pressure minimum here due to standing waves (see Fig.2) – choose a 1/3 or 2/3 position instead. The mix position should not be halfway between walls, as again, you'll experience frequency cancellation due to the pressure minimum of the standing wave.

***Next month we'll be looking at surround sound monitoring. All pictures and diagrams courtesy of Genelec OY.***

## VIRTUOSO STRINGS

From Ilio Entertainments comes a major release. The Virtuoso String Series by Ruth Hunter is the first significant string library to arrive in 3 years. The players are first-call musicians whose passion and sensitivity are fully revealed in these recordings. The main feature of this library is the variety of articulations used to create natural, fluid performances on your sampler. From up and down strokes to hand attacks you'll have plenty of options to simulate the natural randomness of real string bowing.

3-CD-Rom Set - £730.00 (Akai, Roland, Emu EOS, SampleCell and Kurzweil)

## LIQUID GROOVES GROOVE CONTROL

The unique and inspiring grooves from "Liquid Grooves" are now available in a Groove Control™ version. Groove Control™ allows you to easily change the pattern, feel and pitch of the rhythms to your music simply by using the MIDI editing capabilities of your sequencer. Imagine being able to tune the Wavedrum™ grooves to the key of your song in real-time, without the rhythm changing! You can also program your own original patterns and fills with the same sounds and mixes from this library!

Akai/Emu, Roland, Samplecell or Gigasampler - £119.00

## RETROFUNK

Spectrasonics has gone all out to create the most comprehensive series of live Drum & Percussion Rhythms ever produced. Producers Eric Persing and Bob Wilson (Liquid Grooves) went to great lengths to insure that every groove was performed with maximum inspiration and is truly "the real deal". Thrill to the Lo-Fi sounds of the 70's! The whole history of Funk grooves is busin' loose, from Funkadelic/Old School/P-Funk throwdowns to the intricate James Brown and everything in between!

Audio CD - £59.95
CD-Rom - £119.00 (Akai/Emu, Roland, Kurzweil & Samplecell)

## BENEATH THE PLANET OF THE BREAKS

Beneath The Planet Of The Breaks is Zero-G's continuing journey to bring you the roughest raw breaks on the planet. Not only do you get the baddest loops imaginable, but you get every loop cut and diced to WAV format for use in every leading music sequencer package, direct from the CD box! Sequel to the multi-award winning "Planet of the Breaks".

Mixed Mode CD (Audio & WAV) £39.95

## TOTAL DRUM 'N BASS

The latest edition in Zero-G's Total Series. Total Drum 'n Bass is everything you need for serious drum 'n bass production. Breakbeats, real bass, sub basses, transformations, percussion and so much more! 2 audio CDs and 1 wav CD-Rom, bursting with top notch samples, tempo matched and edited to perfection! You'll never need another drum 'n bass sample CD.....Total Coverage!

3-CD Pack (2 Audio, 1 PC-Wav) - £59.95

## FOLEY SFX SERIES

After 2 years in the making, the Foley Series is the first set of its kind that gives you that true Hollywood sound that we are used to hearing in major motion pictures, and a must have set for all sound professionals. East West present 10 CDs, 2000 sounds, fully indexed catalog and filemaker disc. Sounds include: impacts, debris, doors, movements, weapons, human sounds, water design, exterior spaces, interior tones and walla sounds.

10-CD Audio Set - £360.00

## ORIENT ODYSSEY

Oriental percussion grooves, string licks and phrases, woodwinds, vocals and ambiences. Instruments include Darbuka, Daire, Davul, Bongo, Tanbur, Emrahan, Saz, Emir, Kemanlar, Kemence, Kaval, Tahzim, Ney and much more.

"The set begins with a series of percussion loops, and moves onto the "plugged" instruments. Next up are the impressively punchy strings, followed by a selection of intricate woodwind patterns." Computer Music

Audio CD - £39.95

## SKIPPY'S BIG BAD BEATS

Ilio Entertainments new release is the first from John "Skippy" Lehmhuhl, an LA musician well-known for programming factory sounds for Korg and Kurzweil. This CD features a large set of "tunafied" grooves, spanning the realms of hip hop, trip hop, r'n'b and more. Groove Control™ activated. "If you're looking for some very now-sounding drum loops, Big Bad Beats will not only deliver but might even represent the future of the sampler CD." Sound on Sound

Audio CD - £39.95
Akai, Kurzweil, Roland, Samplecell - £149.00

## PERCUSSIVE ADVENTURES

[illegible] layered construction tools which will astound you with fresh journeys of contemporary rhythmic delights! Percussive Adventures is capable of unlimited rhythmic structures for every compositional need in all areas of production and broadcast media.

2-CD Audio - £99.00
2-CD-Rom - £199.95 (Akai, Emu, Roland, Kurzweil or Gigasampler)

## ROOTS OF THE PACIFIC

Top Hawaiian producer David Russell explores the rhythms of the Pacific islands, and records them in amazing fidelity. You'll find ensemble and solo drum performance styles from the Hawaiian Islands, Fiji, Tahiti, the Cook Islands, New Zealand and more. Plus you'll get individual drum hits, chanting, authentic natural ambiences- a complete island paradise on audio CD!

Audio CD - £39.95

## ROOTS OF INDIA

Delve deep into the roots of India and explore its many regions. Maharashtra, Bengal, Assam, Punjab, Madras, Gujarat and Rajasthan. With loops and hits from instruments such as Pakhwaj, Tavil, Tabla, Dholak, Ghungroo, Dhol, Chanda, Jhanj, Chimta, Mridangam, Ghatam, creation of this emotionally driven fusion of earth and music is only limited to your inspiration.

Audio CD - £59.95

## ROOTS OF SOUTH [illegible]

Over 70 traditional percussion instruments (including drum sets) have been professionally recorded creating a collection of over 300 grooves from the Caribbean coast of Venezuela to the South of Argentina in styles such as Candombe, Murga, Samba Cueca and many more. Also over 250 single hits and multi samples.

Audio CD - £59.95, Akai CD-Rom - £199.95

Introducing the NEW XSAMPLE CD-ROM series. This high quality 9-CD library brings together all the instruments you could ever need. All samples are pre sorted as multisamples in both mono and stereo. A FREE audio demo CD is available upon request.

Disc 1 - Mixed 1 (Rhodes, Wurlitzer Electric Piano, E-Bass)
Disc 2 - Mixed 2 (Alto Sax, Bass Flute, 8 String Guitar)
Disc 3 - Brass 1 (French Horn, Trumpet, Trombone)
Disc 4 - Mallets (Vibraphone, Marimbaphone, Xlophone, Glockenspeil, Crotales, Steeldrum)
Disc 5 - Solo Strings 1 (Violin, Viola, Violincello, Double Bass)
Disc 6 - Woodwinds 1 (Oboe, English Horn, Bassoon, Contra Bassoon)
Disc 7 - Mixed 3 (Oboe d'amore, Violincello, Spinet, Klavichord, Kalimba)
Disc 8 - Mixed 4 (Concert Harp, Psaltery, Celeste, Kavlcymbal)
Disc 9- Percussion (Congas, Conga, Timbales, Vibraslap, Tambourine, Shakers, Agogo Bells, Cowbell, Triangle, Wood Blocks, Guiro, Cabasa, Maracas, Claves, Whistle, Drumsets, Prepared Piano, Kazoo, Jew Harp, Vocal Effects)

Single CD-Rom - £99.00 or 9-CD-Rom Set - £399.00 (Available in Akai, Emu EOS & Gigasampler formats)

TIME+SPACE

Call for our free catalogue and demo CD
Tel: 01837 55200 • Fax: 01837 55400
sales@timespace.com • www.timespace.com

# New Limited edition cover

## That's a free ☑ cover upgrade for all subscribers

### Subscribe...

- 12 issues with the image uncluttered by words
- Exclusive to subscribers
- Free delivery (UK only)

**And save 15% on the cover price**

**Subscribe online @:**

**www.futurenet.co.uk**

**Hotline: 01458 271122**

Overseas readers please call: +44 1458 271122
**IMPORTANT:** quote code: **MIXP74** when ordering. Lines open 8am-8pm, Mon-Fri.

## YES! I want to subscribe to THE MIX

| | | | |
|---|---|---|---|
| ☐ *UK (direct debit) | 12 issues | £40.70 | SAVE £7.18 |
| ☐ UK (cheque/switch/credit card) | 12 issues | £44.29 | SAVE £3.59 |
| ☐ Europe/Eire (airmail) | 12 issues | £67.88 | |
| ☐ Rest of World (airmail) | 12 issues | £77.88 | |

Your subscription will start with the next available issue

Title.....Initial.....Surname .....

Address .....

Postcode .....Country.....

Tel no. (inc. STD) .....

☐ **Direct Debit** (UK only) – complete form opposite. The full amount of your subscription will be deducted in advance and in one lump sum

☐ **Cheque** – payable to Future Publishing Ltd (Sterling cheques drawn on UK bank accounts only)

☐ **Mastercard** ☐ **Visa** ☐ **Switch** Switch issue no. and valid date _____

Card no:

_____ Expiry date: _____

Signed _____ Date _____

**UK send this form POSTAGE FREE to**
**The Mix**, Future Publishing, FREEPOST BS4900, Somerton, Somerset, TA11 6BR (No Stamp reqd.)

**Overseas send this form to**
**The Mix**, Future Publishing, Cary Court, Somerton, Somerset, TA11 6TB. UK

☐ Tick if you do not wish to receive information about special promotions

Offer closes: 16.5.00

**ORDER CODE: MIXP74**

**Instructions to your Bank or Building Society to pay Direct Debits.**
**Originator's Identification Number 930763**
Please send this form to the address shown

Future PUBLISHING | DIRECT Debit | THE MIX

Future Publishing Ltd, Cary Court, Somerton, Somerset, TA11 6BR

1. Name and full postal address of your bank or Building Society branch

To: The Manager

Bank/Building Society

Address

Postcode

2. Name(s) of account holder(s)

3. Branch sort code (from the top right hand corner of your cheque)

4. Bank or Building Society account number

5. Instruction to your Bank or Building Society
Please pay Future Publishing Direct Debits from the account detailed on this instruction subject to the safeguards assured by the Direct Debit Guarantee. I understand that this instruction may remain with Future Publishing and, if so, details will be passed electronically to my Bank/Building Society.

Signature(s) Date

Banks and Building Societies may not accept Direct Debit Instructions for some types of account.

Ref No (office use only)

You may photocopy this blank form and then complete it.
You cannot fax or e-mail direct debit forms.

Cubase Tips

# Tooled-up

Do you know Cubase's editing tools inside and out? If not, read on for some handy tips that'll make your life easier...

words **Adam Crute**

One of the reasons Cubase has remained so popular must be its inherent flexibility. As the old saying goes, there is more than one way to skin a cat – and that, metaphorically at least, is exactly what Cubase allows for. There are many ways of achieving the same result tucked away within Cubase. Which method to use is largely down to the user's personal preferences, but there's also an element of 'horses for courses' involved too.

The best way to know what method to use in what situation is to know what tools are available and what they actually do. So without further ado (and before I start rolling out some more of my Granny's old sayings) let's take a look at Cubase's various tools.

## The Toolbox

As you will no doubt be aware, right-clicking in a window opens up a toolbox (For Mac users, it's [option]+click, or go to the tools menu). The majority of Cubase's windows have their own set of tools available for quick and easy editing, some of which are found in all the editors and some which are exclusive to only one. Most of the tools also have modifiers, accessed by holding down combinations of the shift, control and alt keys (command, control and shift on a Mac – but not necessarily in that order!). Here's a rundown of what each tool does...

## Common tools

1. The Pointer. This is the most-used tool. Use it for selecting parts or events, either by clicking on-screen items or 'rubber banding' groups of objects. Holding down Shift allows you to add or remove an item from the selection. Clicking and holding on an item or group of items turns the pointer into a hand and allows you to move the item freely around the screen. Hold down the Alt key before clicking and dragging to create a copy of the item. In the Arrange window, hold down Control when moving an item to create a ghost copy of a part (more on ghost parts later).

2. The Pencil. This tool is mainly used for creating and re-sizing items. The items can be parts in the Arrange window or events in the List and Key editors. To create an item, simply click and drag at the desired location in your song. In the Key and List editors, using combinations of the Shift and Control keys creates notes with varying velocity. There are four values of velocity that can be entered in this way, from 32 (Control and Shift keys held) to 127 (no keys held).

To resize an item, select a pre-existing item with the Pointer, change to the Pencil, click on the selected item and drag it to the new size. In the Key and List editors it's possible to re-size more than one event at a time. Using the Pointer again, select the notes to be edited, switch to the Pencil, click on to one of the selected events and drag it to the new size. All the other items selected are stretched or shortened by the same amount (see Figs.01a and 01b). Holding down the Control key while doing this will force all selected parts to the same size (see Fig.01c).

Back in the Arrange window, there are some more handy little shortcuts to be had from the Pencil. You can 'drag out' copies of a part by holding down Alt, clicking on the part to be copied and dragging – the part will be copied repeatedly to fill the selection. Doing the same thing with the Control key held down will drag out ghost copies of a part.

3. The Eraser. This does exactly what it says on the tin. Use it to delete items by clicking on them or moving across them while holding down the mouse button. But you didn't really need me to tell you that, now did you?

4. The Magnifying Glass. This is really more of an audition tool than anything else. In the Arrange window, clicking a »

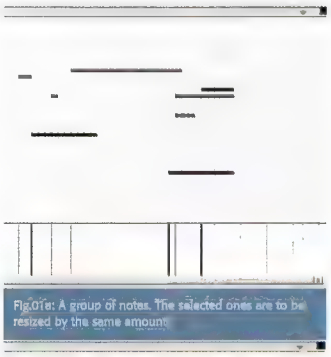


Fig.01a: A group of notes. The selected ones are to be resized by the same amount

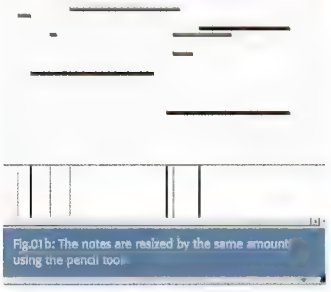


Fig.01b: The notes are resized by the same amount using the pencil tool

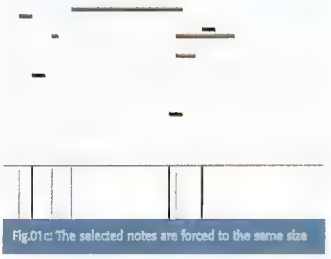


Fig.01c: The selected notes are forced to the same size

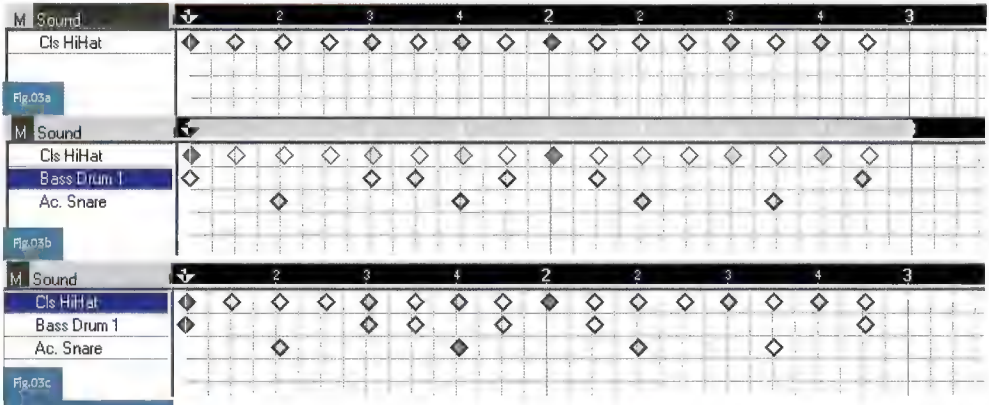



Fig.03a: An un-quantised hi-hat pattern
Fig.03b: The kick and snare pattern. Notice that the hi hat (greyed out as it is a separate part) has a different feel to it.
Fig.03c: The feel of the kick, snare, and hi hat patterns are now matched.

part with the Magnifying Glass changes the part's appearance to represent the events it contains Moving the mouse while keeping the button pressed then plays any events that the Magnifying Glass passes over. In the Edit windows, the Magnifying Glass simply plays the event it is clicked on.

## Arrange window tools

5. The Q Match tool. This Arrange window tool is exceptionally useful, especially when dealing with drum and other rhythmic parts. Using this tool always involves two parts: a reference and a target. You simply select the Q Match tool, then drag the reference part and drop it on top of the target. The idea behind what this does is simple: to match the feel of the target part with that of the reference part.

Let's say we had a two-bar hi-hat part that looked something like Fig.03a. Notice that the part is un-quantised. Now let's say that we had programmed a kick and snare pattern that had a slightly different feel (see Fig.03b). Now, the aim here is to match the feel (i.e. the bar positions of the events) of the kick and snare with that of the hi-hat part. In the arrange window, drag the hi-hat part onto the kick and snare part. A dialog box will pop up to ask if you want to include the accents (the velocities of the hi-hat part) – the options are self-explanatory. That done, and all being well, the result should be as tight as a gnat's chuff. So to speak (see Fig.03c).

There is a little more to it than this, as the quantisation setting does come into play, but we shall cover that when we take a look at all of the quantisation methods in a future instalment.

6. The Mute tool. Use this tool to mute individual parts within an arrangement. That's it - there's nothing more to be said about it. Move along, now.

7. The Scissors. This tool is used for cutting a part into segments. In normal use, the Scissors simply create a split in a part at the point at which the Scissors are used. However, holding down the Alt key before clicking on a part creates splits along the full duration of a part. Each new cut has the same length as that of the first cut .

8. The Glue. The opposite of the Scissors tool. Clicking on a part with the Glue tool merges it with the following part on the same track, creating a single, longer part. The two parts in question do not have to be next to each other, as any space in between them is included in the new part. Holding down Alt when using the Glue tool will merge all parts from the selected part to the last part in the arrangement.

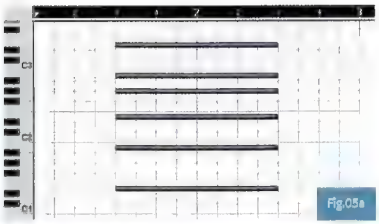
## Editor tools

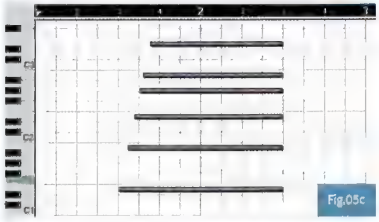
9. The Crosshair (a.k.a. the Compass). This is probably the most versatile tool in Cubase's armoury. Its function not only varies with which window you are using, but also with what area of the window you are using it in. Let's start by looking at its function in the Key editor as this is where it is most useful, and has the most modifications.

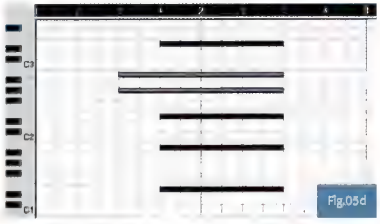
Fig.05a shows an E major chord as voiced on a guitar. Using the crosshair to click and drag a line that slopes from top left to bottom right adjusts the lengths of all the notes to follow this line (see Fig.05b). Doing a similar thing with the Alt key held down adjusts the start points (see Fig.05c) while still keeping the note ends in their original positions. Hopefully, it will be clear at this point why I used a guitar-voiced chord – the crosshair is perfect for creating a strummed effect.

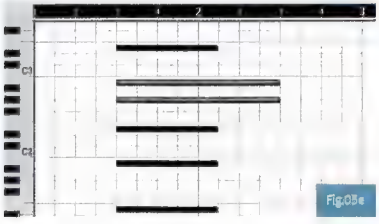
Holding down the Control key when using the crosshair allows you to move either the start or end points of an event or group of events. Using the tool on the left half of a note moves the start point without affecting the end point (see Fig.05d); using the tool on the right half alters the end point without affecting the start (see Fig.05e).

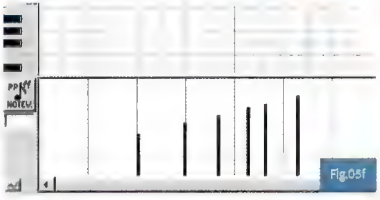
The crosshair can also be used to edit data in the controller portion of the Edit window. Its operation here varies depending upon what type of controller information you are editing, but the following general rules apply: using the tool with no extra keys held down simply alters any existing data to follow the line drawn, for example ramping velocities as in Fig.05f. However, in the case of a MIDI continuous controller





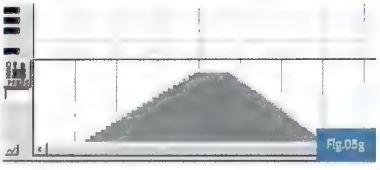




Fig.05a: The starting point for each of the Crosshair examples.
Fig.05b: Staggering the end points using the Crosshair with no modifier.
Fig.05c: Staggering the start points using the Crosshair with Alt held.
Fig.05d: Line up start points without affecting the end points by holding down the Control key. Only selected events are affected.
Fig.05e: Line up end points in the same way as with Fig.05d, but click in the right half of the event.
Fig.05f: Note velocities 'ramped' using the Crosshair in the controller area of the Key editor.
Fig.05g: Continuous controller messages can be created by holding down the Alt key when using the Crosshair. Here, the aftertouch is increased with a snap value of 32 and decreased with a snap value of 64.

message, such as volume, there is not necessarily any volume data to edit (the volume stays at whatever level its last message told it to be – it doesn't have a continuous stream of 'volume=112' messages). To get around this, simply hold down the Alt key while drawing the desired fade (or filter sweep or whatever). Now Cubase will create a series of controller messages to match the desired line, their spacing being determined by the Editors' 'snap' setting (see Fig.05g).

10. The Brush. This tool is used for creating large numbers of events quickly and easily. In the Key and Drum Edit windows, clicking and dragging the Brush on the screen creates a line of notes whose length is defined by the current quantise value, and separation by the current snap value. Combinations of the shift and control keys create different note velocities, in the same way as they do with the Pencil tool.

You will notice that notes are only drawn in a horizontal line from the point of your initial click. Holding down Alt enables you to 'paint' events anywhere you want. In the List editor the Brush performs the same operation, but can be used to create any type of MIDI message, with the message type being defined by the 'ins.' setting at the top of the List Edit window. We shall cover this in more detail when we take a closer look at the Editors.

11. The Kickers. These two tools are used for nudging events earlier (to the left) or later (to the right) in a part. The amount an event is nudged by is defined by the editor's snap value.

12. The Drumstick. This tool, exclusive to the Drum editor, is used, rather unsurprisingly, to create events on the drum grid. Using the shift and control keys while entering notes adjusts the note's velocity (the velocity values that are created are defined for each individual instrument in the drum editor). Fig.07 shows where these four different velocity levels can be defined. Notes in the Drum editor only appear as individual hits with no note length. The notes entered with the drumstick do indeed have a length value attached to them, but normally this isn't important, as most synths' drum kit patches are set simply to trigger on an incoming note on message and ignore the note length. If, however, you need to enter longer notes, then these longer lengths can also be set on a per-instrument basis.

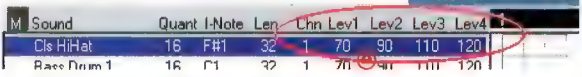



Fig.07: The velocity value created by holding down nothing, shift, control and control+shift when using the drum stick are set here on a per-instrument basis.

# help file

Problems in the studio? Ghosts in your machines? Contact the *Help File*, where our team of audio experts try to to solve your technical torments

## glossary

**AES/EBU**
The professional, stereo digital audio interconnection standard created by the Audio Engineering Society and the European Broadcast Union. Supports 24-bit digital audio and does not include copyright restrictions.

**AIFF**
Audio Interchange File Format. A standard file format for digital audio, originating from Apple, and therefore popular on Mac-based systems.

**AV**
Audio Visual. Equipment labelled AV has improved functionality, making it suitable for AV work.

**Balanced**
An output is split into two signals, identical except for a 180° phase relationship. On input, the 'cold' (out-of-phase) signal is inverted and re-combined with the 'hot' (in-phase) signal. Noise from the cable run is eliminated.

**Bias**
A high-frequency signal added to audio for recording onto tape. This helps overcome the inertia of the magnetic coating. The bias signal level required varies according to the tape coating. High-quality cassette machines incorporate variable bias controls for precise calibration.

**bit**
Each '1' or '0' that makes up a digital word. In digital audio, the more bits, the higher the resolution. CD-quality digital audio uses 16 bits per word.

## the masterminds

this month's *Help File* team

NAME
Trevor Curwen
OCCUPATION:
producer/engineer
CHOSEN SUBJECTS:
vintage gear, microphones, poisonous plants

NAME:
Ian Waugh
OCCUPATION:
technical writer
CHOSEN SUBJECTS:
music software and hardware, internet, disappearing acts

NAME:
Oz Owen
OCCUPATION:
*TM* reviews editor
CHOSEN SUBJECTS:
Logic Audio, MIDI, processors, consoles, human biology

## Rack attack

**Q** Help! I've just taken charge of an ageing but still most useful Ensoniq Mirage rack sampler. The guy who was letting it go told me he had been using it free-standing, and so never had any need to rack it up securely with other gear for live or recording use. Unfortunately I really need it racked!

Apparently rack owners were originally supplied with a set of steel 2U rackmounting ears, and boy, could I do with some now. I gather from what I've picked up across the net that Ensoniq and once bitter rivals E-mu are now all part of the same company, but a call to their UK office drew a blank, as have other appeals across the net. I'm soon to embark on some live work and I'd like everything racked securely, so if anyone out there has what I'm after and wants rid of it, please let me know. I'd be willing to pay a reasonable sum for a pair in decent condition.

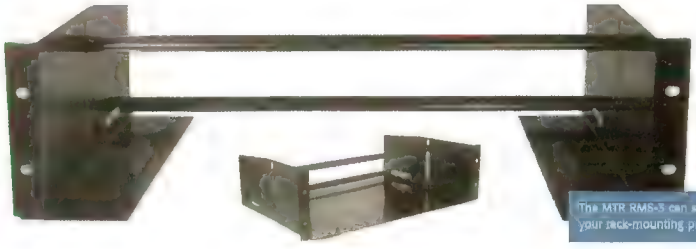
Alternatively, if there's a company that sells what I need, then I'd be much obliged to hear from them, or if anyone has the number of a suitable place…

**Al Ferrier, by email**

**A** Off the top of my head, Al, I can't think where you might pick up a set of rack ears for an Ensoniq Mirage, but maybe one of our more charitable readers can help you out… anyone? (Replies via the *Help File*, please!)

Er… failing that, best get onto MTR Ltd, who do a whole range of studio accessories that'll make life a little easier. In particular, they do the RMS-3, a rack unit specially designed to hold non-rackmounted equipment featuring adjustable bars to allow different-sized units to be clamped securely in your rack. The RMS-3 retails for £27 and MTR can be contacted on 01923 234050.

**Oz Owen**



The MTR RMS-3 can solve all your rack-mounting problems

Although acoustic tiles can make your room sound better, they're useless as far as soundproofing is concerned

## Soundproofing dilemma

**Q** I have been using a spare room in the house as a studio for some time now, but have reached the stage where I would like to use a fairly large adjoining stone-built outhouse for a live room to record the occasional drum kit and other live instruments. Getting a wiring loom into the space is not a problem, but as there is a party wall on one side of the outhouse I am worried about noise upsetting the neighbours. Any suggestions on how to soundproof the space on a budget?

**Dave Thompson, by email**

**A** Soundproofing performs a twofold function in that it keeps exterior noise out of the recording space as well as stopping your own noise from getting out, so is worth considering even if you live in a detached house in the middle of nowhere.

First the bad news – it's extremely difficult to completely kill low-frequency noise, and the chances are that whatever you do, your neighbour will still be able to hear a thump from a bass drum on his side of the wall. So regardless of any soundproofing, diplomacy is always a good option – keep the neighbours informed and stick to sociable hours.

Sound can be transmitted structurally as well as through the air, so both these things need to be taken into account when designing soundproofing. A 'room within a room' is a popular approach and will attenuate a great deal of the sound. The idea is to create an inner 'shell' inside the space that is as isolated as possible from the outer walls so as to minimise structural-borne vibration. This can include a 'floating' floor, but these are complex structures and not really a practical proposition for a home studio.

Just doing the walls and ceiling, or just the walls, will help matters considerably. This is done by attaching wooden battens to the wall, filling the spaces between them with a proprietary sound insulation material such as Rockwool, and fixing one or two layers of plasterboard over the top. Neoprene rubber can be glued to the back and ends of the battens before fixing for a degree of isolation from the structural walls and the floor, and mastic can be used to seal any gaps between the plasterboard and floor.

If you're using the existing floor, a degree of isolation from structurally-borne vibration can still be attained using a similar principle as the floating floor by building a wooden 'raft' supported on rubber or foam blocks for the drumkit to sit on. Likewise guitar amps can be sat on a foam mat.

If you don't like the idea of a permanent structure, you could buy a commercially-available self-assembly isolation booth. However, these are expensive and could set you back a few grand, depending on the size. Studiospares' catalogue (0171 482 1692) features isolation booths, rockwool and anti-vibration mats.

**Trevor Curwen**

## You crack me up...

**Q** For about a year now I've had a home studio based around a second-hand Atari 1040STE running a 'naughty' copy of Cubase V.2.

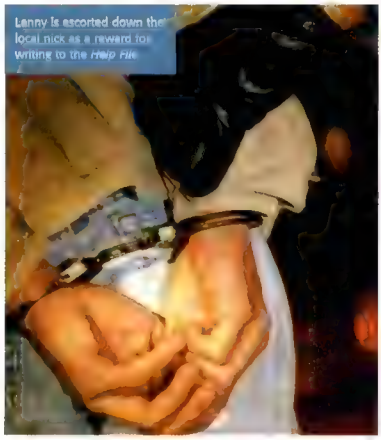
Although every time I wanted to use the system I had to let it crash once, on turning it back on again it would work as long as required. Recently, however, it won't right itself and just flickers on and off. Please help me as I am a confused Luddite where computers are concerned.

**Lenny McCartney, Bath**

**A** Steinberg say that this is a common enough problem; fortunately a solution is close to hand. Simply balance on one foot in front of the offending Atari, close your eyes and repeat the mantra 'I wil go to the Dome' while rotating clockwise in an unwieldy fashion. Repeat as directed on the first weekend after the full moon in any given month, and Bingo!

Failing that, why not try to leave your cheap, miserly and penny-pinching ways behind you, invest in an authentic copy of aforementioned software, and experience the delights of Cubase operating smoother than the man Stringfellow in a Swiss finishing school.

**Oz Owen**



Lenny is escorted down the local nick as a reward for writing to the *Help File*

## glossary

**CD-R**
Recordable CD. Achieved by 'burning' data into a special coating on the CD. The newest incarnation is CDR/W (read/write) which can be erased, as well as written

**Condenser**
A type of microphone that uses the reaction of a diaphragm to change a capacitance. Condenser microphones need an applied voltage to work, some with a battery, some with an external (also known as 'phantom') power supply

**Converter**
In audio, this refers to either A-D (analogue to digital) or D-A (digital to analogue) converter 'chips' or gear. Currently conversion stages are under much scrutiny, as digital audio systems are becoming more and more prevalent

**dbx**
Noise reduction that employs fixed-ratio companding over the entire audio bandwidth with added pre-emphasis for high frequencies. Up to 30dB of noise reduction is possible. Professional systems use dbx Type 1, and lower quality domestic applications use Type 2

**Diaphragm**
A microphone's thin film 'plate' that moves back and forth according to changes in air pressure. In condenser mics, the diaphragm, and a fixed back plate, form a capacitor, the value of which changes according to the distance between the two

**Dynamic**
A type of microphone that uses a coil (which is attached to the diaphragm) moving in a magnetic field to produce an alternating current proportional to the sound waves that move the diaphragm

**EIDE/IDE**
Data buss/connection standard for internal PC hard drive connections

## glossary

**Anything, software or hardware, that alters the nature of a signal, such as a reverb unit, pitch or vocoder.**

**[illegible] that is 'hard' form (in rather than on or other media.**

**[illegible]nt statement attached to software. Freeware can be copied, used and distributed freely without infringement of copyright.**

**Hardware**
**Any part of a product that isn't data (software) – electronic components, chassis, and so on.**

**IRQ**
**The interrupt address for a PC card. Every card or device has a unique interrupt address so that the PC knows what device it is talking to. The trouble comes when two devices [illegible]en the same IRQ.**

**Loops**
**Convenient audio segments that when played over and over are rhythmically coherent. A single loop might be a one-bar drum pattern, for example.**

**[illegible] provided by [illegible] MIDI tasks such as [illegible]nth editor. Mixermaps can be saved and loaded [illegible] files.**

**Modulation**
**Interaction between two [illegible] its shape on [illegible], a sine wave [illegible]. Using a volume control would cause the volume to go continually up and down. In MIDI, modulation is a standard controller message.**

**MTC**
**MIDI Time Code. A representation of SMPTE timecode within the MIDI data protocol.**

## Trinity troubles

**Q** My MIDI set-up is based around the Yamaha QY700 sequencer. A few months ago, I purchased a Korg TR rack. The problem is that it can only store one multi setup, so that I have to manually reprogram the multi data between projects and make detailed notes so that I can return to work on previous tracks. What options would you recommend for MIDI info storage/retrieval to save the TR Rack multi setup info to reload at a later time? I do own a PC, if this could be used.

**John Buckley, by email**

**A** It's nothing short of a complete and utter fact, John, that the TR Rack can't hold more than one 'multi' setup at any one time, meaning there's no easy way to skip between projects, loading a specific multi for each one.

So, in the first instance, turn to your QY700 for a solution. Leave a gap on the QY at the beginning of your arrangement and record a system exclusive, or 'sysex' dump from the TR Rack containing all relevant MIDI data (i.e. the data pertaining to the multi setup).

Now when you load up your sequenced arrangement on the QY, the sysex data will be present in the gap before the arrangement, and playing the arrangement will send out the sysex data to the TR Rack, effectively 'reprogramming' the TR with the previously saved multi data. Doing this for each of your songs will give the flexibility you're looking for and will save lots of time when switching between arrangements/songs. It may sound like a pain in the arse, but when you've done it a couple of times, you'll think nothing of it, as it only takes a minute.

There is another problem you could encounter, however. The TR Rack sends out sysex data in one continuous stream, and some sequencers can have a problem with receiving data so quickly, causing all kinds of errors when the data is recorded. Everything will look as if it's been recorded properly, but when you try and replay the sysex data from the sequencer into the TR unit, it won't give you the results you're after.

Some manufacturers get around this by incorporating a 'sysex packet delay' feature, whereby you can split the information being sent, introducing gaps between bursts of data, the result being that everything becomes more manageable for the receiving sequencer. The Korg, however, doesn't have this feature, so if you experience problems transferring sysex data between the QY and the TR, you should switch to 'Plan B'.

Plan B will need your PC. Given that software sequencers are prone to the same 'overload' problems when receiving bucketloads of sysex data, you may have to get a dedicated sysex manager, giving much more flexibility when recording and editing sysex data. Emagic's SoundDiver package will give support for your TR Rack and sysex editing facilities. At £179 it may be a tad pricey for what you have in mind (look out for an upgrade to version 3.0, SoundDiver fans) but there are a few that you can download freely/cheaply from the internet – www.synth zone.com is a good place to start, under the 'shareware and freeware utilities' section.

**Oz Owen**

HHB

CDR850
Compact Disc Recorder

**ANDERTONS MUSIC CO**
Guildford Tel: 01483 456777

**DAWSONS**
Warrington Tel: 01925 632591

**DIGITAL VILLAGE**
Barnet Tel: 020 8440 3440

**DIGITAL VILLAGE**
Croydon Tel: 020 8407 8444

**DIGITAL VILLAGE**
London W3 Tel: 020 8992 5592

**EDDIE MOORS MUSIC**
Bournemouth Tel: 01202 395135

**GIGSOUND**
London SW16 Tel: 020 8769 5681

**THE GUITAR & AMP CENTRE**
Brighton Tel: 01273 676835

**KGM / SOUND CONTROL**
Wakefield Tel: 01924 371766

**THE M CORPORATION**
Nottingham Tel: 0115 9474070

**THE M CORPORATION**
Ringwood, Hampshire Tel: 01425 470007

**MUSICAL EXCHANGES**
Birmingham Tel: 0121 248 5868

**MUSICAL EXCHANGES**
Coventry Tel: 024 7663 5766

**MUSIC VILLAGE**
Cambridge Tel: 01223 324536

**MUSIC VILLAGE**
Romford Tel: 020 8598 9955

**Q MUSIC**
Birmingham Tel: 0121 643 4655

**ROSE MORRIS**
London WC2 Tel: 020 7836 9741

**SERIOUS AUDIO**
London WC1 Tel: 020 7637 9498

**SOUND CONTROL**
Bristol Tel: 0117 934 9955

**SOUND CONTROL**
Dunfermline Tel: 01383 733353

**SOUND CONTROL**
Edinburgh Tel: 0131 557 3986

**SOUND CONTROL**
Glasgow Tel: 0141 204 0322

**SOUND CONTROL**
Leeds Tel: 0113 242 6601

**SOUND CONTROL**
Manchester Tel: 0161 877 6262

**SOUND CONTROL**
Newcastle Tel: 0191 232 4175

**SOUND CONTROL**
Sheffield Tel: 0114 221 3007

**SOUND CONTROL / KGM**
Wakefield Tel: 01924 371766

**SOUNDS LIVE**
Newcastle Tel: 0191 230 3422

**SOUND DIVISION**
London N1 Tel: 020 7609 6639

**STUDIO SPARES**
London NW1 Tel: 020 7485 4908

**TURNKEY**
London WC2 Tel: 020 7379 5655

HHB
FIRST WE LISTEN

**HHB Communications Limited**

73-75 Scrubs Lane · London NW10 6QU · UK
Tel: 020 8962 5000 Fax: 020 8962 5050 E-Mail: sales@hhb.co.uk
Visit HHB on line at http://www.hhb.co.uk

# COOL FRONT. SERIOUS BACK.

## HHB CDR850 CD RECORDER

One look at the back panel and it's easy to see why the HHB CDR850 leaves other CD recorders where they belong: in the bedroom! XLR and RCA analogue inputs and outputs, an AES/EBU digital input, optical and coaxial SPDIF digital I/Os and parallel remote control, the CDR850's comprehensive connectivity perfectly complements its class leading sound quality and ease of use.

And if you work entirely in the digital domain, the new CDR850 PLUS adds a Word Clock input and a balanced digital output to the CDR850's already very impressive spec. Before you buy a CD recorder, it pays to check around the back. See both sides of the HHB CDR850 at your nearest dealer.

*CDR850 PLUS adds a Word Clock input and balanced digital out*

*A full range of HHB high performance CD-Recordable media includes the world's first fully Orange Book compatible 80 minute CD-R and CD-RW discs, plus 74 minute Silver, Gold, Printable, Bulk Packaged and Re-Writable discs.*

HHB Communications Ltd · 73-75 Scrubs Lane, London NW10 6QU, UK
Tel: 020 8962 5000 · Fax: 020 8962 5050 · E-Mail: sales@hhb.co.uk

HHB Communications USA LLC · 1410 Centinela Avenue, Los Angeles, CA 90025-2501, USA
Tel: 310 319 1111 · Fax: 310 319 1311 · E-Mail: sales@hhbusa.com

HHB Communications Canada Ltd · 260 King Street East, Toronto, Ontario M5A 4L5, Canada
Tel: 416 867 9000 · Fax: 416 867 1080 · E-Mail: sales@hhbcanada.com

**http://www.hhb.co.uk**

FIRST WE LISTEN

Digital Recording and Mastering Tools · HHB Advanced Media Products

sponsored by

# a&r dept

Your demos rated or slated by *The Mix* and our discerning record industry pals. Meet this month's team...

Simon Aldridge
A&R, Columbia Records

Luke Cunningham
Label Manager, Freedom 4

Sam Winwood
A&R, Sony S2

Sil Willcox
MD, Cruisin' Records

## THE MOO SCHOOL
## SCHOOL WORK

TM: The rapping on this hits you in the face the second the opening track starts. And there's a distinctly British feel to the whole thing: humour, cynicism, and healthy blends of other esoteric nuances (hell, there's even a reference to John Cleese). The trouble is, all the cleverness is kind of overshadowed by the musical clichés that are all too prevalent. And it all gets a bit tedious after the first five minutes or so. Hone it down a bit, chaps, and the qualities that are already there should shine.

Sam: A bit too lightweight

Sil: This posse are very competent and put together a great song in their style, it has been well thought out, complemented by well edited samples. But it's a bit limp for me, with a the rapping sounding too localised for an international market

Luke: Weird hop! Great attempt at rap with warped lyrics and a distinct UK perspective. It needs a lot of work, though. Concentrate on some more ideas before approaching labels.

Simon: Talking about badly chosen names! This is an 'East-End' rapper who is not at all Full Phat - more like old cheese

**More from: Michael Tel: 0171 439 9696**

## ASTRAY THE MISFORTUNES OF VIRTUE

TM: Although Simon Williams, a.k.a. Astray, has obviously absorbed a shedload of Depeche Mode/ Tears For Fears/ Ultravox over the years (quite a while ago, obviously...), he's got a certain quality to his songwriting that can't be denied. If he gets up-to-date, the whole package might just come together.

Sam: Dated and miserable.

Sil: Old fashioned and boring. Nobody is looking for a new Ultravox; powerful old sounds don't make a good song. It's not the time for New Romantics, so change your vocal and writing style.

Luke: What you get if you put Depeche Mode through a photocopier.

Simon: I thought for a moment I was listening to '80s band Talk Talk or Tears For Fears, but then this guy starts singing in an even more out-of-tune Marc Almond kind of way and it all turns out to be impossible to listen to as his pitching really is so out. Anyway, Marc Almond essentially sang 'out of tune', but he had immense character and passion in his voice and had control of his pitching that worked. Not so here

**More from: Simon Williams Tel: 01705 738031**

## 3 TYPES OF SHIT
## INTEGRITY FOR SALE

TM: 'Whipped Up Pitches' kicks in with a seriously esoteric bass line which really grabs you by the proverbials and begs you to sit up and take notice. Which we did. But then we got disappointed. There are some good ideas floating around here, but they ultimately suffer from not being well enough thought out. 3 Types Of Shit (and I suspect our industry pals may allude to the name) require some sense of direction here. The crew seem rather quick to get a few elements going and simply drop them in and out of the mix. One of the banes of computer-based music making perhaps? It's a pity, really, because the ideas are in there somewhere. Collaboration could be worth considering. Working with the same people can make things a bit anal. Which, I believe, is where we came in (or out...)

Sam: Three types? I only heard one.

Sil: An interesting bass line travels through a mostly unidirectional piece

Luke: Simple idea. Well executed, dark and dirty 'dungeon house'. It's worth pursuing this sound to see how far you can push the idea

Simon: Can be flushed down the same loo

**More from: Jim Perkins Tel: 0181 896 0811**

## a&r checklist

We receive a mountain of tapes every month, so to maximise your chances of having your demo reviewed (and, if you're really good, getting on *The Mix* CD) we need you to provide the following:

- Decent quality cassettes, (preferably chrome type II), CD, DAT or MiniDisc.
- A kit list of the gear used to produce the demo.
- A biography of the act. We want to know all about you, your studio and your production background!
- Artwork. This can be a picture of the act, or maybe an original groovy graphic.
- Most important of all, send us extremely cool music that genuinely deserves to be going places.

**Unsolicited packages might be accepted at the following address:**

***A&R Dept,***
***The Mix*, Future Publishing**
**30 Monmouth St,**
**Bath, England BA1 2BW**

## THE MANTARAY DEMO

TM: 'Instantly appealing is not a phrase we use too often here. So let's make an exception. There's a real cinematic and atmospheric edge to these tracks. The vocals are similar to the ex-Sneaker Pimp singer, Kelli (what happened to her, eh?) and there's a real trip hop vibe throughout. We all know that trip hop, in its original form at least, was buried a while back, but The Manataray (catchy name, too) show that taking on a style and making it your own can really be very effective. The secret is in the production, and this exactly where these guys earn quite a few extra brownie points along the way. Lush arrangements and cunning use of effects make this something really rather special.

Sam: It doesn't really go anywhere.

Sil: I love the name and from the vocal effect and delivery you definitely get a strong visual image of what this act is about. Although it's simply structured, careful thought and application have achieved its simplicity. Very promising. If you are young send me some more (and a photo).

Luke: Reminiscent of Curve. And that's about it

Simon: Another soft female vocal over trip hop-style beats and atmospheric synths, and it's positively boring even though the singer has a really nice tone

**More from: Nick Hall Tel: 01332 232982**

## WASTED TALENT SOULMENTATION

TM: While it's very easy to dismiss formulaic r'n'b as complete tosh, there are the odd tracks that smack of quality songwriting. This is a prime example. With a bit more honing (especially in the vocal department) this could be the next Backstreet Boys, or Another Level (good or bad, I dunno...). There seems to be an increasing market for this kind of stuff, and whatever your thoughts on the genre, it's a massive seller. And these guys do it rather well.

Sam: Nice enough r'n'b

Sil: Although I have heard this type of soul sung in many studios over the years, you cannot deny this is a very well-penned song and deserves a publishing deal at least. Yet in reality, it is increasingly hard to get soul acts signed, which I personally feel is a shame. The singer delivers this song in a deserved manner. A great track

Luke: Good harmonies, well-written and arranged pop, but it lacks originality. Add that elusive unique idea and it could be a candidate for chart attention.

Simon: Wasted talent? Not if you stick to your day job, it isn't. This is, to be fair, an OK, old school soul ballad, but again the singer's pitching is so out at times it's hard to listen to and unfortunately he has very little in the way of soul that would see him through a song with such bad tuning. Get a decent voice on it and I'd like to hear the song again

**More from: Wasted Talent Tel: 01484 432300**

## BILL CHALMERS E.T.A.

TM: There are loads of angst-ridden songwriters out there (with the possible exception of Richey Manic – but maybe he made the right choice...) It's one thing to be blue with attitude, and Bill does this pretty well. But then, so does Nick Cage, and so does Trent Reznor (as well as a plethora of other slightly depressed attitudes), but the difference is that they are at least believable in their sometimes bleak outlook. That's not to say that Mr. Chalmers' efforts are a complete disaster, (and some of the demos that are thrown into *The Mix*' industrial-sized bin are testament to that) but it's an area where the stakes can be very high. If Bill has a passion for the kind of music he is currently creating (and if not, what the hell is he doing here?) then great. If he needs to move on – and I think he should, in a kind of sideways way, then he needs a heck more of a strong identity. That's what always makes the difference. And I, for one, reckon he's capable of it, so, if you're up for it Bill, give us more...

Sam: It needs better production ideas.

Sil: Interesting lyrically, but had me hanging myself by the end. The vocal delivery seems to have neither passion nor effort

Luke: Please make it stop. Please. Arrggghh!

Simon: This wants to be Nick Cage. It is actually scary and goes on about "inhaling cuts and emotions" which is very weird! Total tosh in fact – sorry!

**More from: b.chalmers@dssr.co.uk**

demo of the mont

## AMORPHOUS: DEMO

TM: This guy is really clued-up when it comes to knowing the elements that are essential for great electronica productions. A thumping bassline assaults the ears immediately on the Prodigy-esque opening track (check it out on the CD), along with an understated, bigbeat, er, beat. Sling in the captivating vocal sample and general raw energy, and Amorphous prove that they know their shit. And we're not just saying that because they used a load of samples from *The Mix* CD, either.

Sam: This track starts off well enough, with a dark broody bass line and a full-on bigbeat loop. Unfortunately, though, this is as far as it seems to go. Apart from the odd vocal sample (pretty much the same one every time), the track does not really develop, and consequently leaves you feeling like you have listened to a minute's worth of music repeated five times.

Sil: A thoroughly convincing offering from this outfit. For once we have a track has all the right things in the right places: a well structured arrangement, a good selection of sounds and a solid bass end that could convince many with smatterings of Prodigy and even early Propellerheads, topped with a Pali-esque vocal delivery. This would make even Mark E Smith smile.

Luke: A well-deserved win for Amorphous. It's well written and arranged, with a fantastic bass line that ties all the elements together in the same way as Roni Size's 'Brown Paper Bag'. Most importantly, though, it has tons of attitude and grit! As a standalone piece of music it's probably not commercial enough to warrant a punt at the dance chart, but it would be perfect for a film score or TV games firm.

Simon: Top rhythm track. Great programming or a good choice of looped sample, but why repeat a two-bar riff and a spoken vocal phrase over and over [illegible] ideas it would make a fairly good white label that could sit in any 'Skint'-type DJ's early set.

**More from David Holmes: 01446 719376**

Win a Nineteen processor! The producer of the best demo we review each month will receive their pick of a multi-FX [illegible] Nineteen range of budget processors, courtesy of *The Mix* and Pure Distribution. (see page 48 of this issue for a full review).

### CD info

**track 02**
Amorphous 'Onictha'
Gritty electronica with some serious pumping bass lines and cool vocal nuances

# THE Mix contacts list

The complete guide to the manufacturers and distributors of the products featured in *The Mix*

**A+F MCKAY AUDIO LTD**
Distributing: Byetone, Digilab, Nevaton, Oktava.
The Studios, Hoe Farm,
Hascombe, Surrey GU8 4JQ
T: 01483 208511
F: 01483 208538
E: afm@afmckay.demon.co.uk
W: www.afmckay.demon.co.uk

**AARDVARK**
see The UK Office

**ACOUSTIC ENERGY LTD**
16 Bridge Road, Circencester,
Gloucestershire GL7 1NJ
T: 01285 654432
F: 01285 654430
W: www.acoustic-energy.co.uk

**ABRA SYSTEMS**
37 Crossall St, Macclesfield,
SK11 6QF
T: 01625 503448
F: 01625 503448
E: info@abrasystems.co.uk
W: www.abrasystems.co.uk

**ADAMSON LOUDSPEAKERS**
see European Audio Group

**ADB**
see Et Cetera

**AKAI (UK) LTD**
EMI Division, Haslemere Heathrow Estate,
Parkway, Hounslow, Middlesex TW4 6NQ
T: 0181 897 6388
F: 0181 759 8268
W: www.akai.com/akaipro

**AKG ACOUSTICS**
see Arbiter Group
W: www.akg-acoustics.com

**ALESIS**
see Sound Technology
W: www.alesis.com

**ALLEN & HEATH**
Kernick Industrial Estate,
Penryn, Cornwall TR10 9RU
T: 01326 372070
F: 01326 377097
E: sales@allen-heath.com
W: www.allen-heath.com

**AMG ELECTRONICS**
Distributing: C-ducer.
2 High Street, Haslemere, Surrey GU27 2LR
T: 01428 658775
F: 01428 658438
E: amg@c-ducer.com
W: www.c-ducer.com

**AMIC UK**
Teddington Studios
Broom Road, Teddington, Middlesex TW11 9NT
T: 0208 614 2592
F: 0208 614 2613

**AMS NEVE PLC**
Billington Road, Burnley, Lancs BB11 5UB
T: 01282 457011
F: 01282 417282
E: enquiry@ams-neve.com
W: www.ams-neve.com

**ANALOGUE SYSTEMS**
17 Cannis Road, St Austell, Cornwall PL25 4EB
T: 01726 67836
F: 01726 67836
www.analoguesystems.co.uk

**ANTARES**
see Unity Audio

**APHEX SYSTEMS**
see Stirling Audio
W: www.aphex.com

**API**
see Funky Junk Ltd, or European Audio Group

**APOGEE**
see Raper & Wayman

**ARBITER GROUP PLC**
Distributing: AKG Acoustics, C-Audio, dbx,
DigiTech, DOD, Fatar, JBL Professional, Kawai,
MIDI Solutions, Musicator A/S, Music PC,
Passport Designs, PG Music, Prosonic,
SampleZone, SKB, SoundQuest, Steinberg, TC
Works, Voyetra, Waldorf.
Wilberforce Road, London NW9 6AX
T: 0181 970 1909
F: 0181 202 7076
E: arbiter@compuserve.com
W: www.arbitergroup.com

**ARBORETUM SYSTEMS**
see Unity Audio
W: www.arboretum.com

**ART**
tbc

**ARX**
see Raper and Wayman

**ATC ACOUSTIC ENGINEERS**
ATC Acoustic Engineers, Loudspeaker
Technology, Gypsy Lane, Aston Down, Stroud,
Gloucestershire GL6 8HR
T: 01285 760561
F: 01285 760683
E: atc-loudspeakers@compuserve.com
W: www.atc.gb.net

**AUDIO TECHNICA LTD**
Technica House, Royal London Industrial Estate,
Old Lane, Leeds LS11 8AG
T: 0113 277 1441
F: 0113 270 4836
E: sales@audio-technica.co.uk
W: www.audio-technica.co.uk

**AUDIO TOYS**
see European Audio Group

**AUDIOWORKS**
109 Greenway, London N20 8EL
T: 0181 445 4331
F: 0181 445 4442
E: info@audioworks.com
W:www.audioworks.com

**AUDIX CORPORATION**
T: 001 01 503 692 4426

**AUTOGRAPH SALES LTD**
Distributing: Lab.Gruppen, Meyer Sound
T: 0171 485 3749
F: 0171 485 0681
W: www.autograph.co.uk

**AVM**
see Et Cetera

**B&K**
see Sound Network

**BARNES & MULLINS LTD**
Distributing: Nobels, Torque
155 Grays Inn Road, London WC1X 8UF
T: 0171 278 4631
F: 0171 837 2184
W: bandm.co.uk

**BBE**
tbc

**BMM ELECTRONICS GROUP LTD**
Distributing: Trantec.
Kestral House, Garth Road, Morden, Surrey SM4
4LP
T: 020 8330 3111
F: 020 8330 3222
E: enquiries@trantec.co.uk
W: www.trantec.co.uk

**BEHRINGER UK LTD**
T: 01932 588826
F: 00800 3333 6666
E: uksales@behringer.de
W: www.behringer.de

**BELLARI**
see Turnkey

**BEYERDYNAMIC (GB) LTD**
Also distributing: Omniphonics, Soundtracs.
17 Albert Drive, Burgess Hill,
West Sussex RH15 9TN
T: 01444 258258
F: 01444 258444
E: sales@beyerdynamic.co.uk
W: beyerdynamic.co.uk

**BIAS**
see SCV London
W: www.bias-inc.com

**BOSS**
see Roland

**BPM STUDIO TECHNIK**
tbc

**BRAUNER**
see Home Service

**BRÜEL & KJÆR**
see Sound Network

**BSS AUDIO**
Cranborne House, Cranbourne Rd.
Potters Bar, Hertfordshire EN6 3JN
T: 01707 660667
F: 01707 660755
E: info@bss.co.uk
W: www.bss.co.uk

**CAD**
tbc

**CAKEWALK**
see Et Cetera
W: www.cakewalk.com

**CALISTAN SOLUTIONS**
PO Box 17550, London NW2 5ZA
T: 0171 691 7823
F: 0171 691 7823
W: www.calistan.demon.co.uk

**CALREC AUDIO LTD**
Nutclough Mill, Hebden Bridge,
West Yorkshire, HX7 8EZ
T: 01422 842159
F: 01422 845244
E: enquiries@calrec.com
W; www.calrec.com

**CANFORD AUDIO PLC**
Crowther Road, Washington,
Tyne & Wear NE38 0BW
T: 0191 417 0057
F: 0191 418 1001
E: sales@canford.co.uk
W: www.canford.co.uk

**CARLSBRO ELECTRONICS LTD**
Cross Drive, Kirkby-in-Ashfield,
Nottinghamshire NG17 7LD
T: 01623 753902
F: 01623 755436
W: www.carlsbro.co.uk

**CASIO ELECTRONICS**
unit 6
1000 north circular road,
London NW2 7JD
T: 0181 450 9131
F: 0181 452 6323
W: www.casio.co.uk

**C-AUDIO**
see Arbiter Group

**C-DUCER**
see AMG Electronics

**CHIAYO**
see CIE Audio

**CIE AUDIO LTD**
Distributing: Chiayo, Wharfdale.
Widdowson Close, Blenheim Industrial Estate,
Bulwell, Nottingham NG6 8WB
T: 0115 977 0075
F: 0115 977 0081
E: audio@cie-ltd.co.uk
W: www.cie-ltd.co.uk

**CIMPLE SOLUTIONS PROFESSIONAL LTD**
Distributing: EES, Seer Systems, Viscount.
Unit 2-17 Wembley Commercial Centre,
80 East Lane, North Wembley,
Middlesex HA9 7UR
T: 0181 904 4141
F: 0181 904 1200
E: service@cimplesolutions.demon.co.uk
W: www.cimplesolutions.demon.co.uk

**CITRONIC LTD**
Halifax Road, Bowerhill, Melksham,
Wiltshire SN12 6XN
T: 01225 705600
F: 01225 709639
E: citronic@compuserve.com
W: www.citronic.com

**CLAVIA**
W: www.clavia.se

**CLM DYNAMICS**
26 Tay Street, Monifieth, Angus'
Scotland DD5 4BG
T: 01382 534868
W: www.clmdynamics.com

**CODA**
see Et Cetera

**CRANESONG**
see Funky Junk Ltd

**CREAMWARE**
see Et Cetera

**CREST AUDIO**
see The Sound Department

**CROWN**
see Fuzion

**DACS LTD**
Stonehills, Shields Road, Pelaw,
Gateshead NE10 0HW
T: 0191 438 5585
F: 0191 438 6967
W: www.DACS-Audio.co.uk

**DAL**
see Et Cetera

**DANISH PRO AUDIO**
see Sound Network

**DATA BECKER**
Unit 9, Bentley Industrial Estate, Bentley,
Farnham, Surrey GU10 5NJ
T: 01420 22707
F: 01420 22807
E: sales@databecker.co.uk
W: www.databecker.co.uk

**DBX**
see Arbiter Group

**DDD**
Distributing: Sonorus.
10 Picknoller Close, Belmont, Surrey SM2 5NQ
T: 0181 642 6306
F: 0181 642 6306

**DEMETER**
see The UK Office

**DENON**
see Hayden Laboratories

**DIGIDESIGN**
Also distributing: Synchro Arts.
Westide Complex, Pinewood Studios, Pinewood
Road, Iver Heath,
Buckinghamshire SL0 0NH
T: 01753 653322
F: 01753 658501
W: www.digidesign.com

**DIGILAB**
see A+F McKay Audio

**DIGITAL AUDIO LABS**
see Et Cetera

**DIGITECH**
see Arbiter Group

**DIGITEQ**
distributing terratec
T: 08709 010021
F: 08709 010832
E: terratec@digitequk.com.
W: www.digiteq.net

**DJ2000 DISTRIBUTION LTD**
T: 0956 702000
F: 0956 702001

**DOD**
see Arbiter Group

**DOEPFER MUSIKELEKTRONIK**
see EMIS
W: www.doepfer.com

**DRAWMER ELECTRONICS LTD**
Charlotte Street Business Centre,
Charlotte Street, Wakefield,
West Yorkshire WF1 1UH
T: 01924 378669
F: 01924 290460
E: sales@drawmer.co.uk
W: www.drawmer.com

**DR T'S**
tbc

**DYNACORD**
see Shuttlesound

**DYNAUDIO**
tbc

**EARTHWORKS**
see Unity Audio

**EES**
see Cimple Solutions

**EL CHOCOLATES**
T: 0171 735 0798
F: 0171 735 0798

**ELECTRONIC COW**
T: 0411 544133
E: electronic_cow@dial.pipex.com
W:
ds.dial.pipex.com/electronic_cow/cownet.shtml

**ELECTRO-VOICE**
see Shuttlesound

**EMAGIC**
see Sound Technology
W: www.emagic.de

**EMIS**
Distributing: Doepfer Musikelektronik.
The Old School House, Cossham Street,
Mangotsfield, Bristol BS17 3EN
T: 0117 956 1855
F: 0117 956 1855
E: EMIS@dial.pipex.com
W: dspace.dial.pipex.com/emis

**E-MU UK**
Suite 6, Adam Ferguson House,
Eskmills Park, Musselburgh,
East Lothian, Scotland EH21 7PQ
T: 0131 653 6556
F: 0131 665 0473
W: www.emu.com

**ENSONIQ**
see E-mu UK
W: www.ensoniq.com

**ET CETERA**
Distributing: AdB/Multi!WAV, AVM, Cakewalk,
Coda, Creamware, Digital Audio Labs/DAL,
Frontier Design, Gadget Labs, Guillemot, KCCM,
Musicware, Syntrillium, Tracer, Turtle Beach,
WaveCenter.
Valley House, 2 Bradwood Court,
St Crispin Way, Haslingden,
Lancashire BB4 4PW
T: 01706 228039
F: 01706 222989
W: www.etcetera.co.uk

**EUROPEAN AUDIO GROUP**
Distributing: Audio Toys, API, Adamson,
Optocore
Audio House, 105 Swift Close, Deeping St James,
Peterborough PE6 8QS
T: 01778 344110
F: 01778 344110

**EVENT**
tbc

**EVENTIDE**
see HHB Communications

**EVOLUTION ELECTRONICS LTD**
8 Church Square, Leighton Buzzard,
Bedfordshire LU7 7AE
T: 01525 372621
F: 01525 383228
W: www.evolution.co.uk

**EXCLUSIVE DISTRIBUTION LTD**
Distributing: Zoom.
Unit 10, Furmston Court, Icknield Way,
Letchworth, Hertfordshire SG6 1UJ
T: 01462 481148
F: 01462 481149
W: www.exclusivedistribution.ltd.uk

**FAIRLIGHT ESP LIMITED**
Unit 12, Spectrum House,
32-34 Gordon House Road,
London NW5 1LP
T: 0171 267 3323
W: www.fairlightesp.com.au

**FAIRMAN UK**
see Funky Junk Ltd

**FAR**
tbc

**FAT**
see Turnkey

**FATAR**
see Arbiter Group

**FCN MUSIC**
Morley Road, Tonbridge, Kent TN9 1RA
T: 01732 366421
F: 01732 350367
W: www.fcnmusic.co.uk

**FOCUSRITE AUDIO ENGINEERING LTD**
19 Lincoln Road, Cressex Business Park
High Wycombe,
Buckinghamshire HP12 3FX
T: 01494 462246
F: 01494 459920
E: sales@focusrite.com
W: www.focusrite.com

**FOSTEX**
see SCV London

**FRONTIER DESIGN**
see Et Cetera

**FUNKY JUNK LTD**
Distributing: Royer Labs, Cranesong, Fairman,
API, Sherman
505-507 Liverpool Road, London N7 8NS
T: 0171 609 5479
F: 0171 609 5483
W: www.funky-junk.co.uk

**FUZION PLC**
Distributing: Crown, Nexo, Sabine, Symetrix.
9 Lyon Road, Walton-on-Thames,
Surrey KT12 3PU
T: 01932 882222
F: 01923 882244
W: www.fuzion.co.uk

**GADGET LABS**
see Et Cetera

**GEM**
tbc

**GEMINI**
Unit C4, Hazleton Industrial Estate,
Lakesmere Road, Horndean,
Waterlooville, Hampshire PO8 9JU
T: 087087 00660
F: 087087 00990
W: www.geminidj.com

**GENELEC**
W: www.genelec.com

**GENEX**
see HHB Communications

**GEORGE MASSENBURG LABS**
see HHB Communications

**THE GLOBAL DISTRIBUTION GROUP**
Distributing: Glyph Technologies, Syntecno.
PO Box 39, Ashdon,
Saffron Walden, Essex CB10 2FT
T: 01799 584925
F: 01799 584094
E: sales@globaldistribution.com
W: www.globaldistribution.com

**GLYPH TECHNOLOGIES**
W: www.glyphtech.com
see The Global Distribution Group

**GOLDSTAR**
tbc

**GOODMANS**
tbc

**GRM TOOLS**
see Unity Audio

**GROOVE TUBES**
see Sound Technology

**GUILLEMOT**
Manufacturing + distributing: MAXI Sound,
maxistudio
T: 0181 686 5600
F: 0181 686 5680
E: general@guillemot.co.uk
W: www.guillemot.com
W: www.maxisound.com

**HAMMOND UK**
19 Presley Way, Crownhill,
Milton Keynes MK8 0ES
T: 01908 263990
F: 01908 265955
E: hammonds@computalynx.co.uk
W: www.hammondsuzuki.com

**HARBETH ACOUSTICS LTD**
Unit 1, Bridge Road, Hayward's Heath,
West Sussex RH16 1UA
T: 01444 440955
F: 01444 440688
W: www.harbeth.com

**HAYDEN LABORATORIES LTD**
Distributing: Denon, Rane
Chiltern Hill, Chalfont St Peter,
Buckinghamshire SL9 9UG
T: 01753 888447
F: 01753 888109
W: www.denon.co.jp

**HEAVENLY MUSIC PRODUCTIONS**
PO Box 3175, St. Osyth, Essex CO16 8GX
T: 01255 821039
F: 01255 821039
E: heavenly@ortiz.demon.co.uk
W: www.ortiz.demon.co.uk

**HHB COMMUNICATIONS LTD**
Distributing: Eventide, George Massenburg
Labs/GML, Klark Technik, Panasonic, Rode,
Summit, Technics.
73-75 Scrubs Lane, London NW10 6QU
T: 0181 962 5000
F: 0181 962 5050
E: sales@hhb.co.uk
W: www.hhb.co.uk

**HISOFT**
Distributing Cinema 4D, Moviepac
The Old School, Greenfield, Bedford,
Bedfordshire MK45 5DE
T: 01525 718181
F: 01525 713716
W: www.hisoft.co.uk

**HK AUDIO**
see John Hornby Skewes

**HOBBYTE**
10 Market Place, St Albans,
Hertfordshire AL3 5DG
T: 01727 856005

**HUGHES & KELLNER**
tbc

**HOME SERVICE**
Distributing Brauner
T: 0208 943 4949
E: louis@homeservice.u-net.com

**HW INTERNATIONAL**
Distributing: Phonic, QSC Audio, Shure.
167-171 Willoughby Lane, London N17 0SB
T: 0181 808 2222
F: 0181 808 5599
E: info@ hwinternational.co.uk
W: hwinternational.co.uk

**INNOVATIVE QUALITY**
tbc

**INTELLIGENT DEVICES**
see Unity Audio
W: www.intelligentdevices.com

**INVISION INTERACTIVE**
T: 001 650 812 7380
W: www.cybersound.com

**JAMO UK LTD**
Oakfield Park, Bilton Rd.
Rugby, Warks.
CV22 7AL
T: 01788 556777
F: 01788 570111
W: www.jamo.co.uk

**JBL PROFESSIONAL**
see Arbiter Group
W: www.jblpro.com

**JHS**
see John Hornby Skewes

**JL COOPER**
see Sound Technology

**JOEMEEK**
Joemeek Distribution,
Quay House, Quay Road,
Newton Abbot, Devon
TQ12 2BU
T: 01626 333948
F: 01626 333157
E: sales@joemeek-uk.com
W: www.joemeek-uk.com

**JOHN HORNBY SKEWES & CO LTD**
Also distributing: Get Yourself Connected, HK
Audio, JHS, Mixx, Scanner, Target, TDK
Salem House, Parkinson Approach,
Garforth, Leeds LS25 2HR
T: 0113 286 5381
F: 0113 286 8515
W: www.jhs.co.uk

**JOMOX**
tbc

**KAWAI**
see Arbiter Group

more over the page »

# contacts

**KCCM**
see Et Cetera

**KENTON ELECTRONICS**
Brookfarm House. Station Rd.
South Wimbledon
SW19 2LP
T: 0202 8544 9200
F: 0202 8544 9300
E: sales@kenton.co.uk
W: www.kenton.co.uk

**KEYFAX**
PO Box 4408, Henley-on-Thames,
Oxfordshire RG8 1FS
T: 01491 577147
F: 01491 413938
W: www.keyfax.com

**KORG (UK) LTD**
9 Newmarket Court, Kingston,
Milton Keynes MK10 OAU
T: 01908 857100
F: 01908 857199
Brochure information line: 01908 857150
E: info@korg.co.uk
W: www.korg.co.uk

**KRK**
see Protape
W: www.krksys.com

**KURZWEIL**
see Arbiter Group Plc

**LA AUDIO**
see SCV London

**LAN GRUPPEN AB**
see Autograph Sales

**LANGEVIN**
see Raper & Wayman

**LEXICON**
see Stirling Audio

**LONGWAVE INSTRUMENTS**
23 Ashley Lane, Hordle, Lymington,
Hampshire SO41 0GB
T: 01425 610849
E: theremin@cwcom.net
W: www.longwaveinstruments.cwc.net

**LUCID TECHNOLOGY**
see SCV London

**MACKIE DESIGNS INC**
T: 01268 571212
W: www.mackie.com

**MACMIDI**
tbc

**MARANTZ PROFESSIONAL**
Kingsbridge House, Padbury Oaks,
575–583 Bath Road, Longford,
Middlesex UB7 0EH
T: 01753 686080
F: 01753 686020
W: www.marantz.com

**MAXI SOUND**
see Guillemot

**MEDIA TOOLS**
Distributing: Quested
12 Flitcroft Street, London, WC2H 0DT
T: 0171 692 6611
E: sales@mediatools.co.uk

**MICRODEAL**
see HiSoft

**MICROTECH GEFELL**
see Stirling Audio
W: www.microtechgefell.com

**MIDIMAN UK**
22 Freemans way, Harrogate business park,
Harrogate, N.Yorks
HG3 1DH
T: 01423 886692
F: 01423 886693
E: midimanuk@compuserve.com
W: www.midiman.com
W: www.midiman.co.uk

**MIDI SOLUTIONS**
see Arbiter Group

**MOTU**
see MusicTrack
W: www.motu.com

**MTR LTD**
Ford House, 58 Cross Road,
Bushey, Hertfordshire WD1 4DQ
T: 01923 234050
F: 01923 255746
E: mtrltd@aol.com

**MULTIWAV**
see Et Cetera

**MUSICATOR A/S**
see Arbiter Group

**MUSIC LAB AUDIO DISTIBUTION**
Distributing: Omnirax, Presonus, Grace Designs
PO box 4601, Kiln Farm,
Milton Keynes, MK19 7ZN
T: 01908 510123
F: 01908 511123
E: info@musiclab.co.uk
W: www.musiclab.co.uk

**MUSIC PC**
see Arbiter Group

**MUSICTRACK**
Distributing: MOTU.
2 The Granary Buildings
Millow, nr. Dunton,
Beds, SG18 8RH
T: 01767 313447
F: 01767 313557
E: info@musictrack.co.uk
W: musictrack.co.uk

**MUSICWARE**
see Et Cetera

**MUTRONICS**
see The Global Distribution Group

**NAGRA KUDELSKI**
3U Long Spring
Porters Wood, St.Albans,
A13 6EN
T: 01727 810002
F: 01727 837677

**NATURAL AUDIO LTD**
Dixies Barns, High Street,
Ashwell, Hertfordshire SG7 5NT
T: 01462 743300
F: 01462 743344
E: naturalaudio@compuserve.com

**NEVATON**
see A+F McKay Audio

**NEWTRONIC LTD**
62B Manor Avenue, London SE4 1TE
T: 0181 691 1087
F: 0181 691 2284
E: sales@newtronic.com
W: www.newtronic.com

**NEUMANN**
see Sennheiser

**NIGHTPRO**
tbc

**NOBELS**
see Barnes & Mullins

**NOVATION EMS LTD**
A4 Westacott Business Centre
Maidenhead Office Park
Maidenhead, Berks. SL6 3RT10
T: 01628 828888
F: 01628 825599
E: sales@novationuk.com
W: www.novationuk.com

**OBERHEIM**
see Cimple Solutions

**OKTAVA**
see A+F McKay Audio

**OPCODE SYSTEMS**
see SCV London
W: www.opcode.com

**OPTOCORE**
see European Audio Group

**ORAM PROFESSIONAL AUDIO**
T: 01474 815300
F: 01474 815400
E: sales@oram.co.uk
W: www.oram.co.uk

**OTARI**
see Stirling Audio

**PANASONIC**
see HHB Communications

**PASSPORT DESIGNS**
see Arbiter Group

**PC SERVICES**
(MIDI Interfaces)
T: 0181 658 7251

**PEAVEY ELECTRONICS LTD**
Great Folds Road, Oakley Hay, Corby,
Northamptonshire NN18 9ET
T: 01536 461234
F: 01536 747222
W: www.peavey-eu.com

**PG MUSIC**
see Arbiter Group
W: www.pgmusic.com

**PHILIP REES MODERN MUSIC TECHNOLOGY**
Unit 2, Clarendon Court, Park Street,
Charlbury, Oxford OX7 3PT
T: 01608 811215
F: 01608 811227
E: info@philrees.co.uk
W: www.philrees.co.uk

**PHILIPS**
see SRTL

**PHONIC**
see HW International

**PIONEER**
tbc

**PLASMON**
T: 01763 262861

**PMC**
tbc

**PRESONUS**
see Music Lab

**PRISM MEDIA PRODUCTS LTD**
Distributing: PrismSound.
William James House, Cowley Road,
Cambridge, Cambridgeshire CB4 4WX
T: 01223 424988
F: 01223 425023
E: sales@prismsound.com
W: www.prismsound.com

**PROSONIC**
see Arbiter Group

**PROTAPE**
Distributing KRK, Schoeps
15 Percy Street,
London W1P 0EE
T: 0207 616 5500
F: 0207 616 5501
E: sales@protape.co.uk
W: www.protape.co.uk

**QSC AUDIO INC**
see HW International
W: www.qscaudio.com

**QUASIMIDI MUSIKELEKTRONIK GMBH**
Bahnhofstrasse 44,
D-35282 Rauschenberg, Germany
T: 0049 6425 93000
F: 0049 6425 930093
E: info@quasimidi.com
W: www.quasimidi.com

**QUESTED**
See Media Tools.

**RAPER & WAYMAN**
Distributing: Apogee, Langevin, Manley, ARX, microboards
Unit 3, Crusader Estate, 167 Hermitage Road,
Manor House, London N4 1LZ
T: 0181 800 8288
F: 0181 809 1515
E: r+w.proaudio@dial.pipex.com
W: under construction

**RANE**
see Shuttlesound

**RED SOUND SYSTEMS LTD**
Bourne House, Cores End Rd.
Bourne End, Bucks, SL8 5AR
T: 01628 819191
F: 01628 819111
E: red@redsound.com
W: www.redsound.com

**RIVER PRO-AUDIO**
Distributing: Memorex .
3, Grange Yard, London SE1 3AG
T: 0207 231 4805
F: 0207 237 0633
E: sales@riverproaudio.co.uk
W: www.riverproaudio.com

**RØDE**
see HHB Communications

**ROLAND (UK) LTD**
Also distributing: Boss.
Atlantic Close, Swansea Enterprise Park,
Swansea, West Glamorgan SA7 9FJ
T: 01792 515020
F: 01792 310248
E: info@roland.co.uk
W: www.roland.co.uk

**ROYER LABS**
see Funky Junk Ltd

**RPTS SYSTEMS LTD**
T: 01869 278673
F: 01869 277884
W: www.rtps.com

**SABINE**
see Fuzion

**SAMICK**
tbc

**SAMPLEZONE**
see Arbiter Group
W: www.samplezone.co.uk

**SAMSON TECHNOLOGIES**
see Sound Technology

**SANKEN**
see Stirling Audio

**SCHOEPS**
see Protape

**SCV LONDON**
Distributing: Berkley Integrated Audio Software/Bias, Creamware, Digigram, Fostex, LA Audio, Lucid Technology, Opcode Systems, Sek'd, Sonic Foundry, SyQuest, Waves.
6–24 Southgate Road, London N1 3JJ
T: 0171 923 1892
F: 0171 241 3644
E: sales@scvlondon.co.uk
W: www.scvlondon.co.uk

**SEER SYSTEMS**
see Cimple Solutions Professional
W: www.seersystems.com

**SEK'D**
see SCV London

**SENNHEISER UK LTD**
Also distributing: DAS Sound Products, Neumann, Elac, Myryad, Anchor
3 Century Point, Halifax Road,
High Wycombe, Buckinghamshire HP12 3SL
T: 01494 551551
F: 01494 551550
E: info@sennheiser.co.uk
W: www.sennheiser.co.uk

**SHERMAN FILTERBANK**
see Funky Junk Ltd

**SHURE**
see HW International

**SHUTTLESOUND**
Distributing: Electro-Voice, Klark Technik, DDA, Dynacord
4 The Willows Centre, Willow Lane,
Mitcham, Surrey CR4 4NX
T: 0181 646 7114
F: 0181 640 7583

E: d.jones@shuttlesound.com
W: eviaudio.com

**SILVER PRODUCTIONS**
T: 01722 336221
F: 01722 336227
W: silver-production.co.uk

**SKB**
see Arbiter Group
W: www.skbcases.com

**SMART RESEARCH**
see Sounds Incorporated

**SMART SOUND DIRECT**
Distributing: SoundTech, Alumabase, Randall
Units 5&6, 38-40 Town End,
Caterham, Surrey CR3 5UG
T: 01883 346647
F: 01883 340073
E: sales@smartsounddirect.com
W: www.smartsounddirect.com

**SOFTWARE TECHNOLOGY**
T: 0161 355 1980
F: 0161 355 1981
E: info@software-technology.com
W: software-technology.com

**SOLTON**
see Audio Awareness

**SONIC FOUNDRY**
see SCV London
W: www.sfoundry.com

**SONORUS**
see DDD
W: www.sonorus.com

**SONY BROADCAST & PROFESSIONAL EUROPE**
Jays Close, Viables,
Basingstoke, Hampshire RG22 4SB
T: 01256 355011
F: 01256 474585
W: www.bpe.sony europe.com

**SOUNDCRAFT**
Cranborne House, Cranborne Road,
Potters Bar, Hertfordshire EN6 3JN
T: 01707 665000
F: 01707 660482
E: info@soundcraft.com
W: www.soundcraft.com

**THE SOUND DEPARTMENT**
Distributing: Ashley, Crest Audio, Community,
EAW, Sound Advance Sytems
19 Blacklands Way, Abingdon Business Park,
Abingdon, Oxfordshire OX14 1DY
T: 01235 555622
F: 01235 536654
E: soundsales@sound-dept.co.uk
W: www.sound-dept.co.uk

**SOUNDFIELD**
Charlotte Business Centre, Charlotte Street,
Wakefield, West Yorkshire WF1 1UH
T: 01924 201089
F: 01924 201618
E: sales@soundfield.co.uk
W: www.soundfield.com

**SOUND NETWORK**
Distributing: B&K/Brüel & Kjær, Danish Pro
Audio/DPA.
T: 0171 890 7070
F: 0171 890 7071
E: info@soundnet.demon.co.uk
W: www.soundnetwork.co.uk
W: www.dpamicrophones.com

**SOUNDQUEST**
see Arbiter Group

**SOUNDSCAPE DIGITAL TECHNOLOGY LTD**
Unit A1, Caxton Place,
Pentwyn, Cardiff, CF23 8HA
T: 01222 540333
F: 01222 540332
E: sales@soundscape-digital.com
W: www.soundscape-digital.com

**SOUNDS INCORPORATED**
Distributing: Smart Research.
T: 01892 861099
F: 01892 863485

E: nick@soundsinc.co.uk
W: www.soundsinc.co.uk

**SOUNDTECH**
see Smart Sound Direct

**SOUND TECHNOLOGY PLC**
Distributing: Alesis, Emagic, JL Cooper, GT,
Line6, Monster cable, Samson, Taylor
Letchworth Point, Letchworth,
Hertfordshire SG6 1ND
T: 01462 480000
F: 01462 480800
E: info@soundtech.co.uk
W: www.soundtech.co.uk

**SPENDOR**
Spendor Audio Systems Ltd.
Station Road Industrial Estate
Hailsham, East Sussex, BN27 2ER
T: 01323 843474
F: 01323 442254
E: spendor@mcmail.com
W: www.spendor.mcmail.com

**SPIRIT BY SOUNDCRAFT**
Cranborne House, Cranborne Industrial Estate,
Cranborne Road, Potters Bar,
Hertfordshire EN6 3JN
T: 01707 665000
F: 01707 665461
E: spiritsupport@soundcraft.com
W: www.spirit-by-soundcraft.co.uk

**SPL ELECTRONICS**
see Stirling Audio
W: www.SPL-electronics.com

**SRTL**
Distributing: Philips, Neato, TDK studio products
Record House, Emsworth,
Hampshire PO10 7NS
T: 01243 379834
F: 01243 430639
E: info@srtl.co.uk
W: www.srtl.co.uk

**STEINBERG**
see Arbiter Group
W: www.steinberg.net

**STIRLING AUDIO SYSTEMS**
Distributing: Aphex Systems, Lexicon, Microtech
Gefell, Otari, Sanken, SPL-electronics, Zobel.
Stirling House, Kimberley Road,
London NW6 7SF
T: 0171 624 6000
F: 0171 372 6370
E: sales@stirlingaudio.com
W: www.stirlingaudio.com

**STUDIO AUDIO & VIDEO LTD**
Distributing: SADiE
The Old School, Stretham,
Ely, Cambridgeshire CB6 3LD
T: 01353 648888
F: 01353 648867
E: info@sadie.com
W: www.sadie.com

**STUDIOMASTER**
14 Tanners Drive, Blakelands,
Milton Keynes, MK14 5BW
T: 01908 216126
F: 01908 216654
E: info@studiomaster.com
W: www.studiomaster.com

**STUDIOSPARES**
61-63 Rochester Place,
London NW1 9JU
T: 0171 482 1692
F: 0171 485 4168
E: 101745.1553@compuserve.com

**SUMMIT**
see HHB Communications

**SUNHAMA**
tbc

**SYMETRIX**
see Fuzion

**SYNCHRO ARTS**
see Digidesign

**SYNTRILLIUM**
see Et Cetera

**SYQUEST**
see SCV London

**SYSTEM SOLUTIONS**
17-19 Blackwater Street,
London SE22 8RS
T: 0181 693 3355
F: 0181 693 6936
E: sales@system-solutions.co.uk
W: www.system-solutions.co.uk

**SYSTEMS WORKSHOP**
Distributing: Tube-Tech, Chameleon Amps, Pearl
Mics.
The Old Smithy, Church Street, Oswestry,
Shropshire SY11 2SP
T: 01691 658550
F: 01691 658549
E: sales@systemsworkshop.com
W: www.systemsworkshop.com

**TANNOY**
see TEAC UK
W: www.tannoy.com

**TARGET MIXING CONSOLES**
see John Hornby Skewes

**TASCAM**
see TEAC UK
W: www.tascam.co.uk

**TC ELECTRONIC**
PO Box 25767
London SW19 6WE
T: 0800 917 8926
F: 0800 917 6510
W: www.tcelectronic.com

**TC WORKS**
see Arbiter Group
W: www.tcworks.de

**TEAC UK**
Distributing: Tannoy, Tascam.
5 Marlin House, The Croxley Centre,
Watford, Hertfordshire WD1 8YA
T: 01923 819630
F: 01923 236290
W: www.teac.co.uk

**TECHNICS**
see HHB Communications

**TIME+SPACE**
Unit 7A, Exeter Road Industrial Estate,
Okehampton
Devon EX20 1UE
T: 01837 55200
F: 01837 55400
E: sales@timespace.com
W: www.timespace.com

**TL AUDIO**
c/o Sonic Touch
Iceni Court, Icknield way,
Letchworth,
Hertfordshire SG6 1TN.
T: 01462 680888
F: 01462 680999
W: www.tlaudio.co.uk

**TRACER**
see Et Cetera

**TRANTEC**
tbc

**TRAXDATA UK LTD**
tbc

**TRIDENT AUDIO LTD**
The Old Forge, Hook Green,
Meopham, Kent DA13 0JE
T: 01474 815300
F: 01474 815400
E: Trident@oram.co.uk
W: www.trident-oram.co.uk

**TUBE-TECH**
see Systems Workshop

**TURNKEY**
Distributing: Bellari, FAT, Quasimidi, Access,
Oberheim, Koblo, Native Instruments, Rotron,
Jomox, Discovery, Normstar, Stdio Electronics.
114 Charing Cross Road,
London WC2H 0DT
T: 0171 379 5148
F: 0171 379 0093
E: sales@turnkey.demon.co.uk
W: www.turnkey.uk.com

**TURTLE BEACH**
see Et Cetera

**THE UK OFFICE LTD**
Distributing: Aardvark, Demeter, Millenium
Media, Z-Sys.
Berkamsted House, 121 High Street,
Berkhamsted, Hertfordshire HP4 2DJ
T: 01442 870103
F: 01442 870148
E: info@theukoffice.com
W: theukoffice.com

**UNITY AUDIO LTD**
Distributing: Antares, Arboretum Systems, CAD,
Chord, Dynaudio, Earthworks, Empirical Labs,
Gallery, GRM Tools, Intelligent Devices, Kind of
Loud, Magma, McDSP, Purple Audio,Wave
Mechanics.
Elms Barn, Baythorne End,
Halstead, Essex, CO9 4AB
T: 01440 785843
F: 01440 785845
E: sales@unityaudio.co.uk
W: www.unityaudio.co.uk

**VESTAX EUROPE**
18 St Chrisophers Road, Haslemere,
Surrey GU27 1DQ
T: 01428 653117
F: 01428 661021
E: vestaxuk@hotmail.com
W: www.vestax.co.uk

**VISCOUNT**
see Cimple Solutions

**VOYETRA**
see Arbiter Group

**WALDORF**
see Arbiter Group

**WAVECENTER**
see Et Cetera

**WAVE MECHANICS**
see Unity Audio
W: www.wavemechanics.com

**WAVES**
see SCV London
W: www.waves.com

**WESTLAKE AUDIO**
T: Larking Audio 01234 772244
W: www.westlakeaudio.com

**WHARFDALE**
see CIE Audio

**XPRESSION**
see Harbelh Acoustics

**YAMAHA-KEMBLE MUSIC (UK) LTD**
Sherbourne Drive, Tilbrook,
Milton Keynes, Buckinghamshire MK7 8BL
T: 01908 366700
T: 01908 369269 (brochure information line)
F: 01908 368872
W: www.yamaha.co.uk

**ZOBEL**
see Stirling Audio

**ZOOM**
see Exclusive Distribution

**Z-SYS**
see The UK Office

a note to manufactu and distributors

If your details do not appear in our listings or if any are in need of updating, please email us at chemix@futurenet.co.uk

# THE MiX readers' ads

## free ads

There are three ways you can advertise your equipment in THE MiX:

1. POST – cut out and fill in the coupon and send to: Readers' Ads, THE MiX, Future Publishing, 30 Monmouth St, Bath BA1 2BW
2. FAX – fax us your ad on 01225 732353
3. EMAIL – send an email with the subject "THE MiX free ads" to: themix@futurenet.co.uk

When sending an advert please remember to state which category you wish the ad to appear in and include full contact details

### KEYBOARDS

**Alesis Q56** plus hip hop card, with manuals, could deliver if reasonable distance £400. Tel Jay T on 0410 340351

**Alesis Q57** synth, 76 semi-weighted keys, great sounds, expandable, good condition £400. Tel 0171 735 2275

**Alesis Q58** keyboard, 88 weighted keys, excellent sounds, four months old £750 ono. Tel Craig on 07989 683576 (Glos)

**Analogue Systems** RS Integrator, pure analogue modular, 12U high monster, mint condition £1,300 Tel James on 0171 733 0007

**Casio CZ101** synth plus edit software and sounds on disk. £85. Casio HT700 synth £65. Fostex X15 multi-tracker plus Porta pack £75. All good condition. Tel Brian 01952 507115

**Casio CZ-5000** unique phase distortion sound, boxed, with manuals, patch charts and stand £180. Delivery possible. Tel Chris on 01772 685529

**Clavia Nord Lead 2** excellent condition, boxed with manual £550. Tel 0113 261 4518 or 0113 275 1636

**EMS VCS3** 1970s vintage synth, serious offers only, around £1,000. Tel Pete on 01705 830191

**Fender Rhodes** electric piano, good condition, complete with case, serious offers invited. Tel 01558 822803 (Llandeilo, West Wales)

**Hammond B2000** double-manual vintage portable organ with separate Leslie cabinet, ex-museum piece, lack of space forces reluctant sale, offers. Tel Stephen on 01355 904997 or 07989 155231

**Kawai K11** synthesizer, mint condition, never gigged, all manuals, British and German, will sell for £375 or wille xchange for Korg N5EX or Yamaha C21 or C2x. Offers considered. Tel Andy on 01935 706535

**Korg 01W/FD** immaculate, hardly used £550. Tel Andy on 07879 617651

**Korg Delta** original '70s polyphonic synth & string synth £275. 01634 718021

**Korg M1** good condition, classic keyboard, all manuals, extra sounds on floppy for Atari £350. Tel 01634 328069

**Korg M1** in good condition, with gig stand £380 ono. Tel Martin on 01203 265391 (Coventry) or e-mail: megamaiden@yahoo.com

**Korg M1** workstation, superb conditon, includes RAM card with 100 extra classic synth sounds £450 no offers. Tel Andy on 07879 617651 (London)

**Korg N264** workstation, brand new condition with box and manuals and two-tier keyboard stand £550. Tel Mike on 0161 442 2030

**Korg N364** workstation, 64-voice polyphony, 47 digital effects, 16-track sequencer, good condition £475 ono. Tel Steve on 01757 700248

**Korg Prophecy** absolutely mint condition, box, card, video, very cool sounds, programmed £400 no offers. Tel Les on 0181 923 5090

**Korg Prophecy** hardly used, mint condition, boxed, plus manuals £360. Tel Andy on 01684 564541

**Korg Prophecy** mint condition, boxed, manuals £360. Tel Andy on 01684 564541

**Korg Prophecy** with video and carry case £375. Tel Aidy on 07974 768904

**Korg T3** plus hundreds of sounds on disks, PCM and memory cards, the Korg T3 is like an upgraded M1 with a disk drive £550 ono. Tel 0171 542 6557

**Korg Trinity Plus** workstation, mint condition, boxed, all manuals, MIDI leads £900 ono or will part exchange for Akai S2000 or S3000XL or other items considered. Tel Red on 07881 818499 any time

**Korg Trinity Pro-X** 88-note weighted controller keyboard, disks of sounds 3900 Tel Mike on 020 7403 7151 or 020 7836 0991 ext. 204]

**Korg Triton** five months old, boxed with manuals £1,400. Tel Lee on 0181 971 2203 days or 0181 643 5918 evenings

**Korg Wavestation SR** mint condition, home use, with manuals £400. Tel 07957 792447

**Korg X3** immaculate, never gigged, 77 sound disks, boxed with manuals £399 ono. Tel Ross on 01705 293983 or 705294 or e-mail: ross@rnb.screaming.net

**Korg X5D** synth, very good condition, hardly used, with PC/Mac softwaare, To Host lead, sustain pedal £200 ono. Tel Mark on 07801 097055 (Essex) after 6pm

**Moog Source** recently serviced £350 ono. Tel Mark on 0114 236 5492

**Oberheim OB3** drawbar organ, virtually brand new £400. Tel Glenn on 0161 764 1514

**Quasimidi Sirius** one week old, mint, boxed £550 or swap for Roland XP-30. Tel Rob on 0191 469 4573 (Newcastle) any time

**Roland D-10** eight-part multitimbral synth, with drums and effects £200. Tel Jack on 01942 877210

**Roland D-50** top condition, two sound cards £310 or possible swap for a Juno 02. Tel Jez on 01785 214549

**Roland EG-101** GrooveKeyboard, with D-Beam, sampler, fat tones, arpeggios and customised styles, few months old, hardly used £260. Tel Dominic on 01438 226717 (Stevenage)

**Roland JD-800** home use only, extra sound cards (including dance), manuals immaculate £595 ono. Tel Iain 01296 487786 (Aylesbury) or e-mail: iain.a.dunn@virginnet.co.uk

**Roland Juno 6** analogue synth, excellent condition, reluctant sale £275. Tel Niall on 0802 729817 (East London) afternoons/evenings

**Roland Juno 106** perfect condition with manual £350. Tel Dale on 0191 415 4628

**Roland Jupiter 6** with flightcase and manual, very good condition £600. Tel Roland on 01525 874409 (Bedfordshire)

**Roland RS-09** analogue organ and strings, three-and-a-half octaves, good condition £175 ono. Tel 01253 294053 (Blackpool)

**Roland SH-101** £210, quick sale. Tel Jim on 01279 771028 or 07977 015359

**Roland SH-101** analogue synth, 100% working £250. Tel 0114 248 4440

**Roland SH-101** analogue synth, excellent condition, with manual and original packaging £230. Tel 0113 283 6497 before 3.30pm

**Roland XP-80** workstation, excellent condition, boxed, all manuals included, plus disks, home use only, never gigged, bargain £750 ono. Tel Ross on 01952 605902 after 6pm

**Roland JD800** synth £550. Korg 01 R/W workstation module £300. Proteus 2 Orchestral module £180. All in great condition, boxed with manuals. Tel 0208 287 5209

**Sequential** Circuits Pro-One in good condition, also Korg Prophecy in excellent condition with hard case and manuals also currently non-functioning Roland RS09 string synth, would suit synth nut with soldering iron. Offers or trade for decent fretless bass guitar. Email henry@chiswick.demon.co.uk or phone 01923 256317 (Herts)

**Sequential Circuits Prophet 5** remote keyboard, very rare, worn like guitar, pitch wheel, mod wheel, bank/memory LED buttons, snap-lok wide strap, proper cable and pro flightcase, this item has been used once for a video shoot and has actually never been connected, best offer secures, cash only, buyer collects. Tel Chazz on 01932 35636

**Spectral Audio Neptune** analogue synth, boxed, unused £300. Tel 0114 248 4440

**Spectral Audio Pro-Tone** unused, boxed £200. Tel 0114 248 4440

**Yamaha AN1x** for sale, very powerful synth with eight assignable control knobs, boxed with manuals, mint condition £375 ono. Tel Tim on 01205 352509

**Yamaha AN1x** virtual analogue synth with eight assignable knobs, very powerful production tool, mint condition, boxed with manuals £550 or would swap for Roland JV-1080 module Tel Tim on 01205 352509 (Lincs)

**Yamaha CS1x** as new, boxed, manuals, software, sequencer £200. Tel 01299 824391 (Worcestershire)

**Yamaha CS1x** dance synth, box and manuals £285. Tel Jim on 01279 771028 or 07977 015359

**Yamaha CS2x** 11 months old, home use only, very little used, boxed as new, bargain £360. Tel 01248 750835 after 2.30pm

**Yamaha CS2x** control synth, loads of great sounds, 43 arpeggiator types, three effects processors, six months old, excellent condition, box, manuals £425. Tel Andrew on 01733 352344 (Peterborough)

**Yamaha DJX** good condition, with manual £195. Tel 01253 294053 (Blackpool)

**Yamaha EX5** workstation, onboard sequencer, sampler (32Mb RAM), good-quality effects, SCSI interface, excellent condition, boxed £1,000 ono. Tel Barry on 0131 476 0604

**Yamaha EX5S** limited edition synth, sampler and sequencer, boxed as new, cost £1,800, will sell for £1,200. Tel 01326 573082 or 01209 313364

**Yamaha PF85** digital piano, 88-key weighted action, built-in stereo speakers, extremely portable, two grand piano voices, Rhodes, vibes, harpsichord and built-in chorus, transpose function, stereo and headphone outputs, full MIDI spec, complete with sustain pedal and owner's manual, best serious offer secures, cash only, buyer collects. Tel Chazz on 01932 356369

**Yamaha PSR520** for sale, perfect condition £100. Tel 0956 912978 (Coventry)

**Yamaha PSR740** keyboard, perfect condition, bought new November 1999, still under warranty, great new sounds (sampled), vocal harmoniser, multi DSP effects, cost £850, accept £580. Cash only please. Tel Steve on 0161 737 3356

**Yamaha PSR7000** £700. Tel 0171 542 6557

**Yamaha SY77** 16-track sequencing synth, loads of sounds and effects, good condition, boxed £325. Tel Simon on 07747 028555

**Yamaha SY85** dance workstation (as used by Moby), fitted with extra sample flash-RAM, disks, manuals, excellent effects (including Aural Exciter) £390. Tel Simon on 020 8599 4668

**Yamaha SY85** with sound disks, manuals, boxed, home use only, excellent condition £450. Tel Dave on 01268 734975 (Essex)

**Yamaha SY95** keyboard, plus extra sounds £425. Tel Carl on 01507 606956 or e-mail: carl@cstocks.freeserve.co.uk

**Yamaha SY99** home use only £625 ono. Tel Mark on 0114 236 5492

**Yamaha V50** digital workstation, fully editable sounds, very fast LFO, 3.5-inch disk drive, sequencer, 16-bit effects £250 or swap for Roland D-10, D-50 or similar. Tel 07977 893963

**Yamaha W5** workstation, incorporating specially fitted vintage sound board, just been serviced, immaculate condition £995 ono. Tel 01633 674160

**Yamaha YS100** FM synth £50. Tel Ken on 0151 291 0774 after 6pm

**Hammond B200** (18250k) organ and Leslie HL822 rotsonic speaker unit c.1978. Portable. Immaculate condition. £460ono. Tel Mike 01933 315378

**Yamaha SY35** professional MIDI keyboard , 61 full-size touch sensitive keys, 16-note polphony plus vector control. Only £230. Tel 01376 321398 or email richardwinsborough@ukmax.com

**Yamaha EX5r** with SCSI board fitted – brand new in-the-box condition with new SCSI board fitted – included many types of synthesis AN, VL and sampling. A bargain at £750. Contact Justin on 0961101449 or email justin@predicaments.com

## SAMPLERS

**Akai MPC2000** 18Mb sampler, drum machine and sequencer, Akai hip hop kit, standard kit, also own dance kit and various loops, boxed with manuals, as new £800 no offers. Tel Andy on 07879 617651

**Akai Remix 16** 18Mb, lots of floppy disks, manuals, good condition £325. Tel Rob on 01622 674373

**Akai Remix 16,** excellent condition, home use only. Floppy disks and manual included. £230ono. Tel Rob 01622 674373/681366

**Akai S1100,** 12 Mb, 20Mb int h/drive, SCSI, fx. £300 Cubase v3.7 and Rebirth v2 £200. Atari 1040 STE and monitor, £80. Tel Pete 07720 468443. email G-force5950@aol.com

**Akai S1000,** extremely good condition. Expanded to 4Mb memory. Akai sound library. Many leads included if needed. Manual, no box. Only £300ono for quick sale. Tel Paul 01252 703109 (Guildford area)

**Akai S20** expanded to 17Mb, excellent condition, boxed with manual £250 ono. Tel Thomas on 0117 908 9913 evenings or 07932 150344

**Akai S20** fully expanded to 17Mb, excellent condition, full manuals £275 ono. Tel 07932 150344

**Akai S20** sampler, in box, hardly used £225. Tel Ken on 0151 291 0774 after 6pm

**Akai S20** stereo sampler, 17Mb RAM, 3.5-inch floppy drive, still boxed with original disks and manual, mint condition £260 ono. Tel Pete on 01282 412117 (Lancs)

**Akai S900** wicked-sounding sampler, eight-output, easy to use sounds, brilliant, especially on drums, genuine reason for sale £250. Tel Ben on 0121 449 2578 (Birmingham area) or e-mail: ben@pootrucks.freeserve.co.uk

**Akai S950** fully upgraded, perfect condition, home use only, manuals, disks included £275 ono. Tel Andrew on 0181 787 2409 days or 01376 330799 evenings

**Akai S950** sampler, fully expanded and in immaculate condition, stereo outs and eight individual outs, boxed with manual £450 ono. Tel Jeff on 0181 520 5646 or 0958 366074

**Akai S950** with memory expansion module and IB109 SCSI/digital in module £350 or swap for Korg Wavestation module. Tel Richard on 01869 249995 evenings

**Akai S1000** extremely good condition, expanded to 4Mb memory, Akai sound library, many leads included if needed, manual, no box, only £300 ono for quick sale. Tel Paul 01252 703109 (Guildford area)

**Akai S1000PB** playback sampler, never gigged, boxed with manual £199 ono. Tel Rob on 01705 293983 or 705294 or e-mail: ross@rnb.screaming.net

**Akai S2000** sampler, 16Mb, home use, boxed with manuals and disks £450 ono. Tel Chris on 01253 838174

**Akai S3000XL** sampler, with EB16 four-channel effects board, 18Mb and over 25 Akai sample library disks, good condition £800. Tel Leon on 0161 374 5112

**Boss SP-202** sampler, as new £180. Delivery possible. Tel Chris on 01772 685529

**Cheetah SX16** stereo, 16-bit, eight outs, 2Mb, 48kHz sample rate, floppy drive, loads of house, drum 'n' bass samples, easy to use £200. TG100 £95. Tel 07833 137684 (Chester area)

**E-mu e64 Ultra** sampler, 72Mb, perfect condition £1,200. Zip drive and CD-ROM drive, necessities for e64 £150. Tel Lee on 07939 206956

**E-mu e6400** all manuals and CD-ROMs, SyQuest EZ Flyer Zip drive, perfect condition £1,100 ono. Tel Lee on 0121 350 1118 (Birmingham)

**E-mu e6400** sampler, 72Mb, manuals, plenty of sample CDs, excellent condition £700 ono. Tel Laurance on 01203 601591 or 07971 168001

**Peavey SPII/SX** sampler system, 32Mb player, 16Mb sampler, full SCSI, S1000 compatible, Soundforge compatible, record while playing. £250. Tel Gary 07879 416345.

**Prophet 2000** sampler keyboard, expanded memory, as uysed by Apollo 440 £250. Tel 01902 744293 or 07977 490925

**Roland S-550** sampler with colour monitor plus hundreds of discs and manual, all for £200 Tel Martin on 01442 258423 (Herts)

**Roland S-750,** good condition, 10 Mb, 8-outs, manual, mouse, wicked filters. £600ono

**Roland SP-808** GrooveSampler, mint condition as only just over one year old, complete with manual and Zip disks, amazing possibilities with this powerful remix workstation £550. Tel Paul on 01493 303097 (Great Yarmouth, Norfolk) or 07899 966785 or e-mail: paul@garage freeserve.co.uk

**Roland W-30** sampling workstation, good condition, complete with manual £400. Tel Jay on 01295 255271 (Oxon) after 6pm

**Yamaha A3000** sampler, mint condition, boxed as new, fully upgraded, Zip drive, quick sale £800 on. Tel Mark on 01489 896905 (Southampton)

**Yamaha A3000 V2** brand new with Zip drive £650. Tel 07939 521567

**Yamaha SU10,** never used, boxed with manual, unwanted present £150. Akai S2800 sampler, boxed with manual, excellent condition, all wires £450. Tel Phil 0958 419251

**Yamaha SU700,** as new, less than one year old. Disks and all cables £700. Tel Linford 01473 226588

**Yamaha SU10** portable sampler, boxed as new, with all leads, hardly used £120 Tel James on 01606 79409

**Yamaha SU10** sampler, box and manuals £150 ono or swaps considered. Tel 07980 489725 after 5pm

**Yamaha SU10** sampler, excellent beginner or DJ sampler, mint condition £100 ono. Tel Ben on 01604 473348 (Northampton)

**Yamaha SU700** loop sampler, two weeks old, a few hours use, boxed with sample CD, demo disk, power cable, instruction manual £500. Tel Rich on 01792 523466

**Yamaha SU700** sample workstation, boxed, as new, with disks and cables, less than year old and in immaculate condition £700 Tel Linford on 01473 226588

## SEQUENCERS

**Yamaha QY300** sequencer, boxed with manuals, instruction vid and PSU. £250. Tel Phil 01446 771248 or email phi@cydonia.co.uk

**Yamaha QY300** music sequencer with built-in sounds and drums £225. Tel 01474 355052

**Yamaha QY300** sequencer, as new condition, with video £250 ono. Tel George on 01631 562963

**Yamaha QY700** £350. Tel Paul on 01904 339102

**Yamaha QY700** sequencer, boxed, with manuals, instruction video and PSY £250 Tel Phi on 01446 771248 or e-mail: phi@cydonia.co.uk

**Yamaha RM1X,** sequence remixer, excellent condition, very little use, still under guarantee. Six months old, manuals, genuine reason for sale, cost £550 will accept £400 (no offers) Tel Eric 0181 682 3761

## DRUM MACHINES

**Alesis SR16** drum machine, boxed, as new, with manual, bargain £85. Tel 01303 257714 (Folkestone)

**Alesis SR16** drum machine, good condition, with manual £145 ono. Tel 01253 294053 (Blackpool)

**Boss DR-202** drum machine with manual, 100s of classic sounds with effects, bass sounds too, full MIDI spec, one year old, as new, offers. Tel Scott on 01592 572240 or e-mail: zooshmcd@hotmail.com

**Boss DR660** drum machine, as new, boxed with manual and PSU. 255 editible fx, MIDI I/O stereo outs. Bargain £150. Tel Darren 01707 882157

**Boss DR-660** boxed, mint, manuals £150 ono. Tel Pete on 07989 776078 (Midlands)

**Korg Electribe ER1** rhythm synth, four months old, mint condition £250. Tel 01332 737702 weekdays, after 10pm

**Roland TR-606** mint condition, original box and instructions £150. Tel Darren on 01933 225360

**Roland TR-909** near mint condition, manual £800. Tel 01702 309472 evenings

**Roland TR-909** very good condition, with manual £850 ono. Tel Dan on 0113 278 7680 evenings

**Simmons SDX** digital sampling drumkit, analogue filters, nine zone intelligent pads, rack stand, leadsa nd huge sound library on hard disk, recently serviced by Simmons £,1000. Tel 01582 761040 or e-mail: rolyk@msn.com

**Yamaha RY30** drum machine, with manuals, good condition £150. Tel 07957 792447

## COMPUTERS

**1Gb SCSI** hard drive in external metal case with integral PSU, IEC mains lead and SCSI cable. Micropolis drive ideal for digital recording, PC or Mac. £40. Tel Gary 01293 534415

**Atari STE** 4Mb computer £45. STFM 4Mb, 16 Hz, TOS206 £65. Falcon Cubase Audio with Clarty sampler £50. FDI £50. Tel Gary 01293 534415

**Atari 1040ST** plus monitor and Hybrid Arts SMPTE sequencer £150ono. Tel Steve 01142 582861

**Amiga 1200** comes with MIDI, 1Gb hard drive and sampler. Offers. Tel Ross on 07932 736540

**Apple Mac** dance studio, 7300/166, 96Mb, 2Gb, *Cubase*, *Logic*, *ReCycle*, *ReBirth*, *Peak*, *MESA II*, 163 plug-ins and more £720 ono. Also 7100/66 with same inside. Tel Dameon on 07931 107918 (London)

**Apple Power Mac** 7600/132, 200MHz, 604e processor 5Gb disk space, 96Mb, keyboard, mouse, AV in and out, perfect for audio, all essential software and fantastic selection of plug-ins, bargain £750. Tel 0161 881 7568

**Atari** 1Mb, no joystick port, Philips colour monitor £85. Tel 01992 622526

**Atari 1040** hi-res monitor, *Pro-24*, *Cubase*, *Game Creator*, *STOS*, very good condition £110. Tel Jamie on 0191 482 4426 (Tyneside)

**Atari 1040 ST**, Atari SM124 monitor, *Cubase* and Steinberg *Midex+* (MIDI In/Out expander, timecode synchroniser/key expander) £200 ono. Tel Lee on 0121 350 1118 (Birmingham)

**Atari 1040 ST** plus monitor and Hybrid Arts SMPTE sequencer £150 ono. Tel Steve on 0114 258 2861 (Sheffield)

**Atari 1040 STE**, 2Mb RAM, SM124 hi-res monitor, *Cubase*, *Twiddly Bits* and 520 ST for spares £225 ono. Tel 07931 507768 (London)

**Atari 1040 STE** 4Mb, *Cubase* program, all leads, two monitors, good condition, other programs included, also JVC tape deck, all in £100 no offers. Tel David on 0171 515 5360 or 0956 302267

**Atari 1040 STFM** 2.5Mb, expanded memory, hi-res monitor, *Cubase* package with dongle, manuals, Version 3.1 with receipts, rock-solid platform £290, can split. Tel Anthony on 0181 699 5578 or 0802 646393

**Atari Mega 4** A4 black and white monitor, TLB accelerator, 80Mb, SCSI drive, SyQuest 44 drive, 300Mb memory, *Cubase V2.1*, plus other software, hasn't been used in years £140. Tel Tony on 0181 789 1912

**Atari ST** 4Mb, hi-res monitor, includes boxed *Cubase* and dongle, extra MIDI output £160. Tel Tony on 01925 711670 or e-mail: ether5@hotmail.com

**Atari STE** monitor, 4Mb, *Notator* (red dongle), mouse, mousemat, very good condition £130 ono. Tel Paul on 01788 844614 or 07818 485752

**IBM ThinkPad** (laptop), 486/100Mhz, 32Mb RAM, 850Mb hard drive, Windows 95, CD-ROM, floppy disk, modem, IBM case, car and TV adaptors, with soundcard for MIDI use and IBM MIDI cable (ideal for touring) £400 or swap for Juno 106 or any other effects. Tel Vivian on 0113 216 3818 (Leeds)

**Performa 5200,** 32Mb new 800HD. OS 7.6, modem 1yr on-site warranty preloaded Cubase, Soundedit and others. Performa and OS manuals. £450 for quick sale. 0181 942 0599/ trampes fel@virginnet.co.uk

**Pentium PC** 133MHz, 32Mb RAM, 2Gb hard drive, mini tower, 16-bit sound, speakers, 14-inch monitor, keyboard, mouse, CD-ROM drive, Windows 95, Microsoft Office 95, *Cubase VST*, *Wavelab V1.5*, *ReBirth*, loads of plug-ins, bargain at £350. Tel Darren on 0958 926876 any time

**Psion 3c** 2Mb palmtop, leather case and PSI-Win software £200 ono. Tel Niall on 0802 719817 (East London) afternoons/evenings

## HARDWARE/SOFTWARE

**Atari SM125** hi-res monitor for Atari STs, offers. Tel Ron on 01708 769993 or e-mail: ron@rocketship.com

***Cakewalk Express*** with manual £20. Tel 01274 598489

**C-Lab Creator** SL. Professional music/MIDI sequencer software for 1040 Atari ST includes dongle. Only £50. Tel 01376 321398 (evenings) email richardwinsborough@ukmax.com

***Cubase DancePac*** (Mac), essential sequential hardware including VST 3.5, Recycle, Rebirth plus dongle. £250ono. Tel Paul 07971 538877 or email paul.grant10@virgin.net

***Cubase Dance Pac*** for Mac, essential sequencing hardware, including *VST V3.5*, *ReCycle* and *ReBirth RB-338* plus dongle and all paperwork £250 ono. Tel Paul on 07971 538877 or e-mail: paul.grant10@virgin.net

***Cubase V3.0*** with *VST V3.5* upgrade, boxed with dongle £100. Tel Chris on 01253 838 174

***Cubase VST*** for PC £100. Tel Lee on 07939 206956

***Cubase VST V3.7*** manuals and dongle, boxed, *ReBirth V2.01*, boxed, *ACID Music* and *SoundForge XP V4.5*, cost over £600, will accept offers over £380 or can separate. Tel Al on 0385 710045 or e-mail bigal@parker28.freeserve.co.uk

***Dance eJay V2*** with Latin samplers £10. Databecker *Music Cnetre* £5. Mixman Studio £5. Cubasis AV £20. 10,000 eJay samples £5. Tel Lampros on 01203 712993 or e-mail: lantiocho@yahoo.com

**Digidesign Session-8** for PC, complete system includes core, studio 882 I/O, R1 remote, MQX32M MIDI, 2GB SCSI, just add 486 PC, offers. Tel Steve on 07801 036169

more ads over the page »

**Music Products** printed circuit boards for sale. Phone for list. Tel 0121 420 3295

**SoundBlaster Live!** soundcard, offers. Tel 07930 522439

**Soundquest *MIDI Tools*** for PC £20. Tel Carl on 01507 606956 or e-mail carl@cstocks.freeserve.co.uk

**Syquest EZ135** SCSI backup, used once only, w/two disks £50. Tel Steve 01243 532172 anytime.

**Turtle Beach Pinnacle** soundcard, Yamaha daughterboard and digital in/out £352.50. Tel Clive at M21 Studio on 020 7253 5860 9.30am-5.30pm, Monday-Friday

## RECORDING

**Allen and Heath** mod 3 desk, 16-8-8, XLR in & out, line in, 24 inserts, mid sweeps, meter bridge, 3 aux channels, seperate power supply very quiet desk with manuals. £450 ono or exchange for compact desk call 01803 8685549 or mobile 0589 721040

**Allen & Heath GS3** 32-32-8-2 mixing desk with MIDI mute automation, manuals but no box. £700. Tel Mark 0208 287 5207

**Aiwa F770** professional cassette decks (pair), best offer secures, cash only, buyer collects. Tle Chazz on 01932 356369

**Allen & Heath GS3** mixing desk, 16:8:16, V4 software, MIDI muting, sweepable mid EQ, over 40 channels with EQ on mixdown, beautiful condition, one owner with original box and manual, rarely used £495 ono. Tel Kelvin on 020 8864 4394 or e-mail: kelvin.r@tanity.demon.co.uk

**Allen & Heath Sabre Plus** Series II, fully modular design 24:16:2, good EQ, six aux sends, inserts on all channels and groups, full MIDI auto-mute computer (including groups and aux returns), snapshot, etc, full bargraph metering, very, very low use, no faults, condition as new, complete with all owner's manuals, best serious offer secures, cash only, buyer collects. Tel Chazz on 01932 356369

**Behringer 8000A** Eurodesk £550. Autocom Pro £70. Virtualizer Pro £85, with insert leads All boxed with manuals bedroom use only. Tel Bruce 01491 638897 or 01132 597786

**Behringer eurodesk MX8000** excellent condition £600. Tel David on 0181 408 0830 (Kingston)

**Behringer MX8000** mixing desk, with meterbridge, power supply, 48/24 channel, eight-bus mixing, only a few months old, boxed, manuals, Cyber Mix £675. Tel John on 01822 820551

**Digidesign session 8 PC.** Complete system, includes Core, Studio 882 I/O, R1 remote, 2Gb SCSI, MQX32M Just add 486 PC. Offers, W.H.Y. Tel Steve 07801 036169

**Five-bay** CD duplicator, kitted with five TEAC CD writers, Plextor 32-speed CD-ROM, 256Mb RAM, PII333MMX chip, SCSI interface running Windows NT4 and *Discguggler*, excellent record ng speed of up to 20 CD-R copies per hour This is a great system for anybody considering starting an indie label Offers in the range of £2,800. Tel Dee on 0115 950 6059 (Notts) or e-mail bigbreddahent2000@hotmail.com

**Fostex D80** digital 8-track with 3Gb hard disk, never gigged, excellent condition £550 Tel Mark 01482 493533

**Fostex D160 II** version, mint condition, home studio only. One year old still boxed £1500. Tel 095-316063 email carnival@tiscalinet it

**Fostex 4030** synchroniser, sold as seen, spares or repair £50 Tel 0181 211 8822

**Fostex D25** professional DAT recorder, fourOhead, timecode, 16Mb RAM, scrub, excellent condition, with manual, cost £5,000, asking £1,250 ono. Tel 020 7686 0374 or 0402 668219

**Fostex D160** hard-disk recorder, 16-track, excellent condition, boxed with manuals £1,200 ono. Tel David on 0181 408 0830 (Kingston area)

**Fostex E16** 16-track multitrack recorder, switchable Dolby C, bargraph meters, full loom available, apart from some meters needing replacement (10-minute job) this machine is like brand new, hardly ever used, any inspections welcome, best serious offer secures, cash only, buyer collects, full reels of tape available £5 each. Tel Chazz on 01932 356369

**Fostex M80** analogue eight-track recorder including PPS sync box, syncs tape to MIDI £299 Tel Mike on 01730 266078

**Fostex M80** eight-track recorder and Studio Master Series 5 16:8:2 mixer plus cabes and lots of other bits and pieces - home use only A complete studio for £1,250. Tel Steve on 01494 533933

**Fostex X14** four-track recorder, boxed, manual £149 new, will let it go for £75 ono. Tel 01677 425568

**Full studio for sale**. Tascam Porta 05mkII, Peavey Unity series mixing desk, NAD tape desk, JVC amp, Goodmans speakers, Korg A5 signal processor, Marshall DRP1, Crybaby wah £750ono (no contact number)

**Mackie CR1604 VLZ** immaculate conditon, hardly used, boxed plus two looms £575. Tel Ray on 0181 983 8228 or 07939 432777

**Oram Octamix** 8-channel rack mixer, boxed, as new, high-end, full open, clean sound £799. Oram Octasonic high precision 8-channel mic preamp, boxed as new £899. Tel Adam 01474 356773 or adbrewer10@hotmail.com

**Pioneer CJH500LTD XZ** as new, never used outside studio £550 ono, with coffin flightcase thrown in. Tel Mick or Jago on 01295 255271 (Banbury) or 0860 129510

**Roland VS-880,** V-expanded, bedroom use only With manuals, video manual, boxed. CD writer, hardly used, manual and Adaptec recording software for Mac/PC. £1000ono. Tel Rob 01622 674373

**Roland VS880** expanded 8-track digital workstation. 64 virtual tracks, two onboard FX units. Hardly used, perfect condit on £800. Tel Phil 0171 254 9977 or email phil.fost@talk21.com

**Roland VS-880** expanded digital eight-track workstation, 64 virtual tracks, two onboard effects units, seriously hardly used, perfect £800. Tel Phil on 020 7254 9977

**Roland VS-880** hard-disk digital multitrack recorder, fully expanded, effects board, manuals, as new £850 ono. Tel Bryan on 01376 519870 (Essex)

**Roland VS-880 EX** digital studio workstation, home use, boxed with manuals £900 ono. Tel Chris on 01255 838174

**Roland VS-880 EX** nearly new, boxed, built-in effects, MIDI-controllable, excellent multitrack digital recorder £900. Tel Mark on 01252 687677

**Roland VS-880** eight-track hard-disk recorder, 2Gb, full onboard effects, with CD record with Adaptec recording software (for Mac and PC), all manuals, VS-880 video manual, all in excellent condition, one year old £1,100 for the lot. Tel Rob on 01622 674373

**Roland VS-880** expanded, digital eight-track, you know the spec, hardly used, immaculate condition £900 Tel 0171 254 9977

**Roland VS-880** expanded, hard disk recorder, dual effects, EQ, SCSI, as new £675 ono Tel 01772 467953 (Preston)

**Roland VSCD** recorder for your VS 1680 and VS-800, mint £375. Tel David on 0181 366 9875

**Samson MPL2242** mixer, 22 channels, four buss, four-band EQ, six aux sends, four stereo returns, phantom mic power, mint, boxed with manuals and 20-space rack £300. Tel Darren on 01273 416530

**Seck 12-8-2** mixer £400. Yamaha RX5 digital drum machine £400. Alan 1040 ST C-Lab sequencer £175. Alesis Microgate £50. Microlim.ter £50. Tascam 22.2 master tape machine £300. Tel Michael 01799 540761

**Simmons 8-channel** MIDI mixers x2 Fully programmable, ideal for live use. £100 each £160 for pair. Tel Mark 01993 881602

**Sony TCD100** portable recorder, excellent condition £395 ono. Tel 020 7686 0374 or 0402 668219

**Soundtracs Megas** desk, 26 mono, six stereo, 24 subs, built-in patchbay, meter bridge, MIDI mut ng, oscillator, EQ on subs, stand, manual, bantams £1,005. See pics at www.citrusuk.net/powerhouse/powercd

**Spirit By Soundcraft Folio** 20:4:2, six aux sends, three-band EQ, swept mids £600 ono. Tel Matt on 01803 324587 or e-mail: headwound@btinternet.com

**Spirit By Soundcraft Folio Notepad** as new, boxed, used three times, cables, under warranty £100, offers accepted. Tel 020 8744 9718 or e-mail. robert@rspeight.demon.co.uk

**Spirit By Soundcraft FX16** mixing desk £550 ono. Tel Simon on 01303 872996 after 6pm

**Spirit By Soundcraft Studio** 24:8:2, immaculate pro-quality, manuals, separate power supply £700. Tel Gavin on 0117 940 9306 (Bristol)

**Tascam DA20 Mkl** DAT machine for sale, still in its original sealed box, unopened, worth over £400 brand new, quick sale £285 Tel Lee on 0114 247 6430

**Tascam DA38.** Boxed unused £875 Tel Neil 0121 776 734

## AMPS/PA

**Bose PA equipment,** 802 and 302 loud speakers, amplifiers and system controller, total approx 6000W, may split. Tel Paul on 01535 645233

**Linear Phase** speakers could deliver if reasonable distance £125. Tel Jay T on 0410 340351

**Marshall 20-watt** lead & bass heads x2, Marshall 1931 1x12" cabinets x4. Watkins limited edition reissue valve copicat £2,250 – no split! Tel 01634 718021

**McGregor** 200W power amp, ideal for monitors, small PA, very good condition £50. Tel John on 01482 587432

**Stageline STA300** power amp, manuals £200. Tel Jay T on 0410 340351

**Tannoy Arden** rare and collectable loud speaker monitors, 15-inch bass unit, dual concentric horn, very good condition £600. Tel Paul on 01535 645233

## EFFECTS

**Alesis MicroVerb 2** £65 Tel Carl on 01507 606956 or e-mail: carl@cstocks.freeserve.co.uk

**Aphex Aural Exciter** Type C £50. Tel 01303 251714 (Folkestone)

**Behringer Dualfex 2** enhancer £80. Tel Carl on 01507 606956 or e-mail: carl@cstocks.freeserve.co.uk

**Boss SE-50** effectsprocessor £175 (includes p+p) Tel Danny on 00 32 3542 0411 (Belgium) or e-mail syndromeda@planetinternet.be

**Behringer Ultra-Dyne** Pro 9024, 24-bit mastering processor, featuring 6-band compressor, noise gate, limiter, 3-band exciter, four types of tube simulation. £270 Tel James on 01380 722960 (Wilts)

**Binson Echorec** PE-603-TU. As used by Pink Floyd. £2,500. Roland Space Echo chorus RE-301 £475. Tacobrahe pedal flanger (1972) as favoured by Jeff Beck £550 Boss pedals: high-band flanger £85, Tremolo pan £165, Digital Dimension £110, Distortion Feedbacker £130, Digital Delay Sampler £85, Dynamic Filter EV5 £215. Tel 01634 718021

**DBX MC6** mini desktop compressor, very versatile, less than one year old, hardly used, boxed with manual, only £50. Tel 0117 969 7200 (Bristol) or 07818 422870

**Digitech Studio Quad V2** four ins, four outs, multi-effects processor, in perfect condition £250. Tel Matt on 0161 881 7368

**Digitech Studio Quad V2** immaculate condition, with manual, four ins, four outs, multi-effects unit £220 ono. Tel Andy on 07879 617651 (London)

**Line 6 Pod** £200. Tel Brad on 01633 865758 evenings/weekends

**MAM VF11** vocoder, filter bank £200 (includes p+p). Tel Danny on 00 32 3542 0411 (Belgium) or e-ma.l. syndromeda@planetinternet.be

**SPL Stereo Vitalizer** £110. Tel Carl on 01507 606956 or e-mail: carl@cstocks.freeserve.co.uk

**Yamaha EMP100** multi-effects £100, offers accepted. Tel 020 8744 9718 or e-mail. robert@rspeight.demon.co.uk

**Yamaha SPX990** FX £350. Alesis 3630 compressor £80 Alesis Quadraverb (front light in display not working hence price) £70. All boxed with manuals. Tel Mark 0208 287 5209

**Zoom 1201** stereo effects £60. Tel Gavin on 0117 940 9306 (Bristol)

**Zoom 1204** excellent condition £80. Tel Paul on 01788 844614 or 07818 485752

**Zoom 1204** MIDI effects rack £90 Tel Jack on 01942 877210

## SOUND MODULES

**Access Virus** rack, analogue sound module with power supply and manuals £680 ono Tel 0114 670 4133 859 or e-mail: mia_karlsson14@hotmail.com

**Control Synthesis Deep Bass Nine** rack synth, 303 emulation, CV, gate, MIDI £120. Tel Jack on 01942 877210

**E-mu Orbit** dance module, immaculate condition, hardly used £350. Tel Ray on 0181 983 8228 or 07939 432777

**E-mu Orbit V1** dance module, excellent condition £260. Tel Chris on 0117 965 5673 (Bristol)

**E-mu Orbit V2** £400. Offers accepted. Tel 020 8744 9718 or e-mail. robert@rspeight.demon.co.uk

**E-mu Proteus 2000** sound module, nearly new, boxed £500. Tel Mark on 01252 687677

**Kawai GMega** 32-part multimbrality, 32-voice polyphony, excellent sounds, fully editable, MIDI In & Out, offers or exchange for MIDI keyboard (with real-time controllers) Tel 07747 6617231 or e-mail: alcrow@lineone net

**Korg Electribe ER1** £200, offers accepted. Tel 020 8744 9718 or e-mail robert@rspeight.demon.co.uk

**Korg M3R** synth module £250.Tel Carl on 01507 606956 or e-mail carl@cstocks.freeserve.co.uk

**Korg N55R** module, half-rack size £160 no offers. Tel Les on 0181 923 5090

**Korg Wavestation A/D** rackmount, fully programmable synth, with loads of usable sounds! Two effects processors on board that can be used with external sounds, looks as new with Data cards, box and manuals £500 Tel Jeff on 0181 520 5646 or 0958 366074

**Novation Bass Station** keyboard £150 ono Tel Iain 01296 487786 (Aylesbury) or e-mail: iain.a dunn@virginnet.co.uk

**Novation Supernova** killer sounds, two months old, as new, boxed, manual, leads £850 ono. Tel Damian on 01273 571280 (Brighton)

**Quasimidi Rave-O-Lution 309** fully expanded, almost brand new, good for dance music £425 ono Tel Simon on 01303 782996 (Folkestone)

**Roland D-110** synth module, complete with box and manuals, home use only, excellent condition £130. Tel 0181 336 2019

**Roland DJ-70 Mkl** five years old but used only once, manual included £700. Tel Glenn on 01788 579113

**Roland JP-8080** four months old, brand spanking new, never used, still boxed, originally cost £999, will accept £550, total bargain, quick sale, must sell or swap for TB-303. Tel Paddy on 07977 494114

**Roland JV-1010** 64-voice synth module, all the sounds of the JV-1080/2080 plus the session board built-in, excellent condition with box and manual £350 Tel Jason 01206 545714

**Roland JV-1080** expanded with techno card, excellent condition £650. Tel 0117 969 7200 (Bristol) or 07818 422870 or e-mail d hewer@virgin.net

**Roland JV-2080** synth module, nearly new, boxed £600 Tel Mark on 01252 687677

**Roland MC-303** as new, box and manual £250. Tel Ross on 07932 736540

**Roland MC-303** as new condition, with manuals and aluminium case £330. Tel Peter on 01279 506529 (Bishops Stortford area)

**Roland MC-303** Groovebox, boxed, original manuals, excellent condition £300. Tel Simon on 01785 601794 (Stafford)

**Roland MC-303** Groovebox, hardly used, as new, manual and leads, boxed £300 or would part exchange for E-mu Orbit. Tel Ben on 01689 851176 or 0410 317742

more ads over the page »

# Studiospares give BIG DEALS on over 3000 items and.....

## AKG C4000

Another AKG classic

A large diaphragm condenser mic at a very small price.

£381 inc VAT

## ALESIS LX 20 ADAT RECORDER

An industry standard at below £1000 (exc VAT). Always in stock.

£1174 inc VAT

## SHURE SM58 THE STEAL OF THE CENTURY

Easily the industry's most popular microphone sold at a popular price !

£79.89 inc VAT

## AMPEX/QUANTEGY DAT DEAL OF THE CENTURY

Limited offer

| | | | |
|---|---|---|---|
| DAT | 16 min. | 1-9 £2.43 | 10+ £2.20 |
| DAT | 34 min. | 1-9 £2.66 | 10+ £2.40 |
| DAT | 48 min. | 1-9 £3.33 | 10+ £2.98 |
| DAT | 64 min. | 1-9 £3.55 | 10+ £3.18 |
| DAT | 94 min. | 1-9 £3.99 | 10+ £3.59 |
| DAT | 124 min. | 1-9 £4.69 | 10+ £4.22 |

Prices include vat.

## AMPEX/QUANTEGY GP9

Easily the Hottest tape around. The new low noise high output tape from the market leaders

1/4" 10up price £19.38

1/2" 7up price £35.19

2" 2up price £122

## OPTICAL LEADS

from £11.[illegible] inc VAT

Toslink Optical Leads with thick jacket. 0.7m and 4m long.

from £17.57 incVAT

Toslink Optical Leads with standard jacket. 2m and 10m long.

## FEEDBACK DESTROYER

The Behringer DSP1100 an intelligent and ultra fast feedback destroyer. This system really works and costs peanuts.

£130 inc VAT

## EUROPA MULTIWAY CABLE

16pr £4.69 metre

4-32 pair foil screened jacketed Multipair. Huge quantities through lowest UK prices.

## TASCAM DA40

£817 inc VAT

The new DAT Workhorse with more features than ever.

## HHB CIRCLE 5 SPEAKERS

£410 pair inc VAT

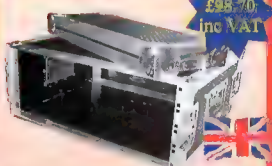
The sweetest sound you ever heard

## SOUND PROOF ROOMS

Room from £2936

Room within a room saves time and money. Sizes from 2m x 2m Proven results. Transportable.

## BUSTER RACK CASES



4U £98.70 inc VAT

Buster Cases cost less and make some big name competitive products look shoddy.

# .....deliver them next day

**Studiospares**

[illegible]

Please send the new 188 page free catalogue to

NAME .....

ADDRESS .....

.....POST CODE .....Mix 05.00

# free ads

**Roland MC-303** with manuals and box with mixer map £275 ono or swaps considered. Tel 07980 489725 after 5pm

**Roland MC-505** boxed with manuals, the ultimate dance music workstation £795 ono. Tel Ben on 01869 325455

**Roland MC-505** Groovebox, fantastic sounds, easy to use, boxed, manuals, like new, phrases, patterns galore £600 ono. Tel Mitch on 0181 287 4533

**Roland MC-505** Groovebox, great condition £550 ono. Tel Craig on 07989 683576 (Glos)

**Roland MC-505** Groovebox, mint, boxed and manuals £600. Tel 01702 309472 evenings

**Roland MC-505** Groovebox, mint condition, boxed, manuals £500. Tel Andy on 01203 451839

**Roland P6-300** programmer for Juno1/2, MKS50. Unused, boxed, pristine condition, can deliver £195. Tel Steve 07801 036169

**Roland SC-88VL** Sound Canvas module, 654 patches, drums, effects, ideal for MIDI files £250. Tel 01273 596289 or 0956 413622

**Roland TB-303** Bassline, complete with box, carry case and manual, all reasonable offers considered. Tel 01208 816294 or e-mail: richard@shackbytheshore.dabsol.co.uk

**Roland TB-303** excellent condition, with manual, will listen to offers. Tel Jamie on 0181 855 0617 or 07788 164808

**Roland TB-303** with 32 knobs, onboard MIDI-to-analogue converter, two oscillators, filter in sequencer £500 or will swap for JP-800, Nord Lead MkII rackmount or keyboard. Tel Paul on 0161 371 9851

**Yamaha EX5R** brand new, in the box, with SCSI board fitted, flagship rack unit with VL, analogue and FSDP synthesis including fully featured sampler £700. Tel Justin on 01273 897505 or e-mail: justin@predicaments.com

**Yamaha EX5R** SCSI, manuals, extra sounds £700 no offers. Tel Mike on 020 7403 7151 or 020 7836 0991 ext. 204

**Yamaha FS1R** FM/FS synthesis, many unique sounds, fully editable, all manuals and leads £290 Tel David on 020 8802 6458

**Yamaha RM1x** boxed, manuals, leads, as new ocndition, seven months old, with loads of Newtronic, Twiddly Bits floppy discs and guarantee plus MC-303 video. All for £420 ono. Tel 0467 421533

**Yamaha RM1x** sequence remixer, good conditron, boxed with manuals, under warranty, great for live bands and geared to dance music £400. Tel Andy on 01253 825924 (Blackpool)

**Yamaha TG500** plus extra sounds £350. Tel Carl on 01507 606956 or e-mail: carl@cstocks.freeserve.co.uk

## MISCELLANEOUS

**6U SKB flightcase** £90. Tel Carl on 01507 606956 or e-mail. carl@cstocks.freeserve.co.uk

**A.T. linear** Phase 8812 studio monitors (pair). 3-way plus port, 240w, 8ohm 28"x 16"x 12". Brand new, unused, still boxed. Carpeted exterior, superb quality. Bargain £500ono. Dynatron speaker cabinets. Reflex enclosure. Floor standing 27"x 15"x 10" genuine mahogany. Cabinets only, good condition £15. Tel Mike 01933 315378

**Audio tape**, various formats, one-inch Ampex 467 digital, two-inch Ampex, quarter-inch Ampex 456, half-inch large reels, small reels, other formats available, boxed, sealed, half list price. Tel Sean on 07867 814884

**Cheri electric guitar** red sunburst with whammy bar, excellent condition with hard case and practice amp £300. Tel 07977 404488

**CLM expounder,** immac EQ and filter £1150. Yamaha FS1R £375. Kurzweii K2000RS, 40Mb sample RAM, 8Mb orchestral boards, 2 SCSI, 350 Mb internal harddrive, 8-outs digital etc. Offers, swaps welcome. Tel Eddie 0181 361 0675

**DJ stuff:** Pair of Technics 1210s MkII, Citronic CDM7:2 mixer, three Stanton cartridges, two Stanton needles, slipmats, audio leads, immaculate condition £800 ono, or would preferably swap for Trinity or XP-60/80. Tel 01705 380826 evenings

***Electronic Music Maker*** back issues, March 1981, Jan, March, April, May, June, July 1982. Contact David Hargreaves, 3 Green Street, Hyde, Cheshire, SK14 1QX. Tel 0161 351 9589

**Fivebay CD** duplicator kitted with five Teac CD writers, Plextor X32 CD-ROM, 256Mb RAM, PII333MX chip running Windows NT4 and discjuggler. Excellent recording speed of up to 20 CD-R copies per hour. This is a great system for anyone considering starting an indie label. Offers in the range of £2,800. Contact BigBreddahEnt@hotmail.com or phone Dee on 0115 950 6059

**Keyfax Phat.Boy** MIDI controller £75. Tel Simon on 01303 872996 after 6pm

**Hard house demo** tapes wanted for release on new label, all tapes will be listened to. Tel James 0802 441780

**Loads of** dance sample CDs, ext CD-ROM player. Tel Rob on 0191 469 4573 (Newcastle) any time

**Mackie 32/8** £1800 Tannoy ref.600 monitors £200. Akai 3200XL fully loaded £800. Studiotech Vocalist Plus £400. TG500 £300 LA-Audio MIDI mute £120. Tel Paul 01224 571067

**Magazine back issues** a history of recording! Over ten years' worth of *Music Technology* and *Home Studio Recording* all boxed and in very good condition. £125. Tel Steve on 01494 533933

**Music books clearout:** *Arranging Technology For Synthesists; Home Recording For Musicians; The Sampling Book; Creative Recording Vols. 1, 2 and 3; The MIDI Home Studio; Complete Guide To Synths; Sequencers And Drum Machines; Recording Production Techniques For Musicians; Sound Reinforcement Handbook; The Whole Synthesizer Catalogue Drum Machine Pattern Book Vols. 1 and 2.* All 13 books for £80, including postage. Tel Carl on 01507 606956 or e-mail: carl@cstocks.freeserve.co.uk

**PRS custom 24,** 1987, vintage sunburst w/case £1,350. Gibson ES345, 1969, Sunburst w/case £1,850. Fender Jazz bass, 1976, natural, pearl inlays w/case £1,050. Tel 01634 718021

**Roland TR808,** MC303, TB303, JUN006, Juno 6. SH101. Alesis SR16, all with manuals and adaptors, offers invited. Tel Darren 01827 330258

**Roland Juno 106** £395 Korg Mir rack £345. Technox synth module £245. DOD D4 guitar FX pedal £95. Tel 0117 977 2345 (Bristol)

**Soundcraft Spirit 16-8-2,** as new £550. Novation Drumstation £200 Atari ST 4Mb £75. Will exchange Drumstation for Roland R8 mk2. Tel John 0181 546 2907

**Soundtracs Topaz** 24-channel £1500. Mackie 1202 VL2 E200 S1000 10 Mb SCSI £600 DX11 £250. MC180 £250. TG100 £140. Alesis monitor 1s £200 Gem S2 with sample software £650. Sony DAT £250. Atari 1040 STE 4Mb mon Cubase £250. R1520's Celestions rig 1.3k. P.V. amp P.V. 30-band EQ stands, rack, leads top sound £1600ono Tel Jason 07801 343476

**Sample CDs:** Pitbull Loops £40. Jazzistic £30. Datafile 3 £10. Datafile 2 £10. E-mu Production CD-ROM Vol. 12 £25. Also D'N'B Construction Set £10. Programmers MIDI Toolkit £10. Tel Jamie on 01603 766431

**Sample CD-ROMs** in Akai or SampleCell format, *Heart Of Africa, Heart Of Asia, Propeller Island Mellotron,* Synclavier library, orchestra and all E-mu library in E-mu format, could swap. Tel Paul on 01535 645233

**Various: MIDI keyboard,** MOTU MIDI interface, 486 laptop, sequencer, Yamaha tone module £400. Akai S3000XL sampler £750. Spirit Folio SX 20-channel mixer £300. Tel Chris 07970 110551

**Various:** Akai S2800 with effects board and Aphex 104 Big Bottom Exciter and Korg 05R/W sound module. Behringer Suppressor and MX3282A eight-bus mixing desk, whole lot for £1,500 or might swap for other gear. Tel 01268 559231 any time after 12pm

**Various:** Alesis SR16, boxed £80. Casio CZ-101 £70. Behringer Virtualizer effects, as new £90. Roland DEP-5 effects, display not working £65. Tel Doi on 07967 409979 (Worcs)

**Various:** Atari 1040 STE, recently serviced £200. Yamaha SY85 synth, factory disks and memory card £450 ono. Yamaha TG55 synth module £150 ono. Mackie 1604 VLZ £550 ono. All in excellent condition. Tel 07989 077862

**Various:** Cheetah SX16 sampler, stereo, 48kHz, rackmount, d 'n' b, house disks £220. Yamaha TG100 sound module £100. Atari *Cubase* £40. Part exchange for S2000, ESI32. Tel 01426 229008 or 01244 546393 (Chester area)

**Various:** Drawmer DS301 MIDI gate, BSS DPR50Z MIDI gate, DBX 160X compressors. DBX 263X de-essers. All in great condition. Tel Paul on 01535 645233

**Various:** Fostex DMT8VL, 2.1Gb, immaculate, boxed, manuals £650 ono. Korg M1R EX £400 ono. Atari 4160 ST, 4Mb, with Atari monitor and *Cubase* plus various other software £250 ono. The lot £1,150. Tel Nick on 0961 819625

**Various:** Korg DW8000 £250. Sampson MPL 22:4:2 £350. Yamaha A3000 V2, 34Mb £750. Digitech Studio Quad £220. Novation BassStation £220 Boss SE-70 £350. Tel Paul on 07930 325495

**Various:** Korg ER1 and EA1 £250 each. Yamaha SU10 sample £110. All in excellent condition and boxed. Tel 01707 882368 (Welwyn, Herts) or 0410 750083

**Various:** Korg M1, Akai MPC2000 with effects board, 32M, Drawmer MX30, LA Audio 4C, Drawmer dual gate £1,750 (can split). Tel Bobby on 01462 630865 or 07957 644630

**Various:** Korg Prophecy £450. Roland JV-1080 £550. Roland JP-8080 £850. Mackie CR1604 VLZ £650. E-mu e6400 £1,500. Boss SX-700 £200. DBX compressor £200. Vortex £100. SPL Vitalizer £150. Quad V2 £250. EPS 16+ keyboard £350. Tascam tape deck 3150. Nord Lead keyboard £550. Atari set-up including *Cubase* £100. Tel Laurance on 07971 168001 Tel Laurance on 07971 168001

**Various:** Mackie 32:8 desk £1,800. Akai S3200XL fully loaded, plus CD-ROM £1,000. TLA Audio preamp compressor £500. Yamaha TG500 £250. Boss DR-660 £150. Tannoy REF600 monitors £200. Digitech Studio Vocalist+ £500. Tel 07931 100987

**Various:** OSCar MIDI manuals £650. Roland TB-303 with manuals £450. Both home use only. Atari 1040 STE with Atari SM124 hi-res monitor, *Cubase* with *The Complete Cubase Handbook* £70. Tel Antony on 01455 446498 after 6pm

**Various:** *ReBirth V1.5* £35. *ReCycle V1.5* £20. Sample CDs, Rhodes Attack £25, LA Riot 3 £20, Crunchy Nut Loops £15. All genuine and mint. Tel 01983 612537

**Various:** Roland Juno 60 with MD8 MIDI box £300 Roland TR-808 £400 E-mu Audio Production Studio soundcard with E-drive £200. Tel Dan on 0115 970 2341

**Various:** ROland Juno 60 with one sticky key. Kenton Pro DCB, turns Juno into MIDI synth £300 Roland MC-202, some sticky keys £120 Buyers to collect. Tel 01222 341597 (Cardiff)

**Various:** Roland MC-303 Groovebox £275. Keyfax Phat.Boy £100. DBX mini compressor, MC6 £50. Tel 0117 969 7200 (Bristol) or 07818 422870 or e-mail: d.hewer@virgin.net

**Various:** Roland TR-727 £129. Apple Power Mac clone, UMax 2000, 166MHz, 64Mb, monitor, *Cubase VST Audio* £399. Oscilloscope, dual trace £59. Tel 01384 353694

**Various:** Studiomaster P7 14:8:16:2 desk, six aux, four-band EQ, 40 inputs £500. Alesis QuadraVerb Plus £125. Behringer SNR £75. 12-unit trolley rack £100. Emo rack light £75. Peavey Max bass preamp £225. Tel Alan on 01683 221263

**Various:** Technics WSA1 keyboard £499. Korg NS5R, boxed £190. Kawai K5000R £390. Yamaha TX802 multitimbral FM £199. TG33 module with vector control £90. Ensoniq DP2 £239. ART FXR £60. Tel Gerry on 01261 815707

**Various:** Yamaha CS10 monosynth, fat sounding, three filter types, input to filter for sound processing with Kenton Pro Solo for MIDI £275. Casio CZ-5000 super synth £150. Tel Sam on 0113 228 4903 (Leeds)

**Various:** yamaha EX7, 64Mb £650 or swap for Supernova. Quasar hardcore expansion board £350 ono. Yamaha DJX £150. Peavey controller £100. Kurzweil, E-mu, Akai libraries, Mac 2VL

## FREE READERS' ADS form

**Name**.....

**Address**.....

.....

.....

.....**Postcode**.....

**Daytime home number**.....

**Equipment category**.....

| | | | | |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**Send to: Readers' Ads,** *THE MIX,* **Future Publishing, 30 Monmouth St, Bath BA1 2BW**

*Cubase V2.5* £80. K2500 expanded, e4K, offers. Tel Andy on 01291 430704

**Various:** Yamaha RM1x £400. Kawai K5000R, bargain £380. Kawai K1M £95. Tel Steve on 01608 664278

**Various:** Yamaha SY85 plus memory card, manuals £500 ono. Yamaha TG55 plus manuals, drum waveform cards £120 ono. Atari 1040 STE £180 ono. Mackie 1604 VLZ £500 ono. Tel Timmy on 07989 077862

**Yamaha CS6X** control synthesizer, two months old as new. £1,200. Roland JV-1080 with expansion boards – vintage piano, techno £750. Quasimidi Sirius, two months old £500. Tel 01983 529434 or email dmitry.sidorin@virgin.net

**Yamaha OX21** keyboard, wicked basses, perfect condition, with manual £100. Novation drumstation, 8-outs, tune, decay, snappy controls, perect condition, boxed with manual .£250ono (no contact number)

**Yamaha SY85 keyboard,** memorycard, disks £470, Akai S950 digital sampler and large library £390, Vintage Keys sound module £350, Spirit Folio 12:2 mixing desk £120, Alesis Microverb 16-bit digital delay unit £75, Fostex X 26 4-track cassette recorder £60, Atari 1040 STF plus hi-res monitor plus Steinberg Pro 24 Software £50, Tel Mark on (01424) 732322

## WANTED.

**Aphex C104,** Mackie 1402 VLZ. Tel Rob on 0191 469 4573 (Newcastle) any time

**Call Out Technician** for Digital Recording Studio. Needs to be familiar with Cubase, Yamaha O2R, Protools, E4 Sampling, Word clock, SMPTE. Call 01672 539696

**Faulty AMS 1580** delay, AMS phaser, Lexicon Jamman. Tel 0121 420 3295 evenings

**Gem S2** sample software, in real need, can pay. Tel 0161 232 1283

**Happy hardcore/bouncy** techno demo tapes wanted for release on established label. All tapes will be listened to. Contact James @ Hect Tech Records 0802 441780

**Korg drum machines** KPR77, KPR55 wanted Tel 07939 514157

**Mackie SR 32:4** must be in good condition, will pay between £700 and £900. Tel Ian on 0151 480 6352 or e-mail: ian.parks@uk.dreamcast.com

**Manager/promoter** required for attractive Indian female singer, for live and studio work. Ample experience in both areas, must have experience and proven track record, no timewasters or beginners please. Tel Jazz 07957 356840

**Novation Supernova** must be in good condition, cash waiting for best price. Tel Andy on 01633 613342

**Operators' manual** for Cheetah 5V master series mother keyboard, photocopies accepted. Tel Diane on 0141 576 0511

**Roland S770** RAS770 expansion board – what the Meg fits to. Anyone selling an S770 with the expansion board and meg. Tel Vas 0802 485724

**Roland SDD-320** Dimension D wanted to buy. Must be in good condition both cosmetically and technically. No silly, over-inflated 'vintage/rare/collectable' prices please. Serious offers to stephen.parsick@ruhr-uni-bochum.de or write Steve Parsick, Roemer Str. 475, D-47443 Moers, Germany

**Roland U-220** plus sound cards. Also wanted: sound cards for Yamaha TG55. Tel 01908 226191

**Yamaha 01V** wanted £750 waiting. Tel Andy on 01926 511169

## PERSONNEL

**Audio engineer** wanted for live work in London, will need to work closely with band and accept little or no pay! We play hip hop, drum 'n' bass, jazz funk. Tel Greg on 07977 939350

**Bright new** male/female production am offer creative, professional environment for special and unusual pop artists. Tel 0181 549 9591 or e-mail: canview@hotmail.com

**CD duplication** from tape, MD, DAT, CD, vinyl £3 each, no set-up charge, no hidden prices, minimum 10, maximum 50 at a time. Tel Jan on 0956 496902 (London)

**Computer music** specialist, troubleshooter, PC audio recording systems, built to order, CD mastering, technical assistance, *Cubase* recording, audio PCs, recording studio. Tel 0151 428 7476 (Liverpool)

**DJs wanted** for WVOne DJ agency. Send tapes or MiniDiscs to 21 Peterdale Drive, Penn, Wolverhampton, West Midlands, WV4 5NY

**Drum 'n' bass** producer, influences: Goldie, Digital & Spirit, Photek, etc. Needs second opinion on work from interested labels/producers. Will send tape/demo, impressive results from limited equipment. Tel Ross on 07932 736540

**Established dance** label looking for extremely talented vocalists, songwriters and producers for signings over the next two months. We are looking for material in all areas i.e. house and garage, r'n'b trance and techno and good pop. Contact Rob 07932 037043

**Established London breakbeat** label looking for artists and producers. Funky, hard, trance an nu-skool styles all welcome. Send demos to: Abstract Data, PO Box 21545, London, E10 5FX

**Female ambient** pop artist requires atmospheric keyboardist, knob twiddler, DJ for experimental live collaboration. Independently released album, exciting project, Björk meets Madonna, John Barry and Brian Eno. Tel Carolin on 0181 440 7691

**Female singer** required for casual Leftfield dance project, Massive Attack, Portishead, EBJG, Lamb. Tel Phil on 01202 691998 (Bournemouth area)

**Fife (Scotland) based** musician looking for collaborators into electro/dance. influences: leftfield, Underworld. PC studio, looking to publish MP3s on the Net. Interest? Tel Scott on 01592 572240 or e-mail: zooshmcd@hotmail.com

**Freelance dance** music producer, engineer, composer & programmer with own studio, hard-disk recording, digital & analogue, working from home. (BA Hons: Commercial Music Production), very cheap and competitive rates! No job too small! Specialise in dance music (trance, d&b, bigbeat, house), Real Audio, WAV, MP3, AIFF, Akai, backing tracks, remixes, drum loops, etc. Tel Mark on 07808 126997

**Guitarist wishing** to join a modern, forward-looking band/musicians who want to experiment a little. If you want to give it a go, tel Lee on 0121 378 0831 (Birmingham area)

**Hect Tech Records**. For back catalogue material and new releases, please send s.a.e for full list to: Hech Tech Records, 116 Chairborough Rd, High Wycombe, Bucks, HP12 3HN

**House DJs,** back to 99/90 record collection. Three boxes of around 300 12"s. All original covers and labels, no time wasters! Tel Vas 0802 485724

**Keyboardist and**/or electronic noise maker wanted for dub-centred band with dance elements, virtuosity not needed but must have good musical sense and commitment. Tel Neil on 07880 596519 (Reading)

**Meek require** bassist, keyboard player, ability to play a great advantage. Tel 020 8519 5805 or visit Web site: www.(twentyfiveeight.)co.uk/meek/html

**Programmer/keyboard** player wanted to form Post 2000 electronica, trip pop influenced band, should be ambitious and have vision. Tel 0171 538 2073

**Programmer/songwriter** working from home, can give private lessons: *Cubase*, sampling, keyboards, sepcialised in dance, garage and drum 'n' bass with that 'live' drum feel. Also pianoa nd harmony tuition. Vintage equipment available. Tel 0171 686 4335 (demo available)

**Required for band:** analogue keyboard player, passion more important than technique. Influences: Joy Division, Eno, Roxy, Can, Wyatt, Bowie (1977), *Phaedra* by Tangerine Dream. Tel Daniel on 0171 873 0888, extension 8745

**Soulful session** vocalists & backing available for work with quality labels/producers. More gospe, r&b singers etc and songwriters wanted to join own quality set. Tel 07980 390135

**Songwriter** seeks technohead collaborators to melt blues and soul with 21st century sounds and beats. Interested? Tel Gavin 01294 224800 or email JHarvey@aol.com

**Talented lyricist** seeks likewise composers. Can write in any style. Tel Daryl 01621 815950 or 0836 798938, (pager) 01523 125926

**Violinist BA** Young Jazz Musician Of The Year 96 and 98, currently with Barbara Thompson and Paraphernalia. Web: http.//come.to/billythompson. All professional work considered, all styles. Tel Billy on 01222 225335 or e-mail· billy@trickl.freeserve.co.uk

## HELP!

**Can anyone** send me FM reviews of the Yamaha EX5, JD-800, JD-990, W-30 please? (I can't afford all those back issues!) Or information if you own one of them. Thanks. Tel Jerry on 01736 711442

**Collector seeks** electronic and music-maker back issues (March 1981, January, March, April, May, June and July 1982). Tel David Hargreaves on 0161 351 9589 or write to: 3 Green Street, Hyde, Cheshire, SK14 1QX

**My RSF Kobol** Expander One is dead. I need to borrow one or obtain legible schematics. can you help? Tel Bruno on 0181 925 7510

## SOUNDS

***A Different Kettle** Of Fish* – The Rob Beadle Triangle Band. Numbered limited edition debut CD-EP. Seven tracks, 20 minutes, send £6 cheque payable to Teeth Records, PO Box 2639, Bath, BA2 5XT

**Amazing sample CD!!** Millennium 2000 looperama! 106 original looped breakbeats, audio format, 75-160 bpm, 15-40 secsm plus 15 fills, rolls, hats, fx etc. 73 minutes. Cool groves for dance maniax! £13 (inc. p&p) 01705 783399

**Any studio** out there giving tuition in pro/high-end skills in mixing, programing, profduction, especially dance with this equipment: O2R, VST, G3 Mac, Akai S3000XL? Tel Vas on 0802 485724

**Belfast label** requires people interested in putting time, effort and money (optional) into writing, recording and releasng music. Massive Attack, Nine Inch Nails, Aphex Twin, Unkle, etc. Tel Mark on (Belfast) 718246 or 876492

***Conquering Dub Vol. II*** CD, a superior colelction of essential roots and steppers, available at Empire Studios, PO Box 110, Manchester, M16 7AS, just £10. Tel 07979 016253. Also at Record Collector shop, 0114 266 8493 (Sheffield)

**D&G production** is a new virtual store, containing soundbanks directed to the attention of musicians, DJs, producers and ardent followers of electronic compositions. For information, visit the homepage: www.dg-production.com

**Drum 'n' bass** kit samples. Do you require that ooomph for those Pro hard step beats? Then this is for you! Over 20 home-made high quality processed stereo samples (WAV format) to construct the backbone of your drum 'n' bass tracks. Kicks, snares, hats, cymbals, etc. Other formats also available on request. On PC disk. Send cheques/POs for £5 to M Wheawill, 41 Woodsend Road, Flixton, Urmston, Manchester, M41 8QY

**Drum 'n' bass** labels, A&R men, DJs, people. Are you looking for remixes, tracks or drum 'n' bass sampler CDs? Tel Imperial Beats on 07931 106918 now for free demos of new LP

**Einstein's Daughter** 10-track CD album, *Safe Beneath The Stars*, as reviewed in *The Mix* (April 2000, p100), "glorious", "a masterpiece". £12.99. Tel Caroline on 020 8440 7691 or e-mail: einsteinsdaughter@hotmail.com

**Fantastic backing** tracks for singers on MiniDisc 100 + tracks – '60s to '90s, chart and others whole lot £50. Tel Dan 0181 509 1091

**Imperial Beats** are renting their garage and drum 'n' bass studio for £40 for the whole day. *Cubase V4*, new Power Mac, Akai, *ReCycle*, Novation and more. Tel Dameon on 07931 107918 (London) for more info

**Independent record** label, UK artists required for glass CD compilation, send four tracks on good-quality DAT or MD plus info about your band, track list, equipment used. Send to IRL, 150 Lothersdale, Stonydelph, Tamworth, Staffordshire, B77 4HX

**Korg Trinity sounds**: 256 new programs, 256 new combinations, home programmed and highly specialised for dance enthusiasts, d 'n' b, trance, house, etc. On PC disk. Send cheques/POs for £5 to M Wheawill, 41 Woodsend Road, Flixton, Urmston, Manchester, M41 8QY

**Mr Mark-a-Malone** producer, songwriter, musician as featured in *FM*90 (Dec 99), 5-track CD available, seriously funky house, garage dance tracks only £5 each. Send cheques to Mark Hoey, 49 Lydals Road, Didcot, Oxon, OX11 7HX. Also I would like to hear from record companies for future releases and productions. Tel 01235 814413 or 0956 586778 or markamalone@talk21.com

**MIDI file arpeggio** patterns: loads of quality instant arpeggio patterns for you to manipulate on PC disk, perfect for trance, progressive house and techno, please send cheques/POs for £5 to M Wheawill, 41 Woodsend Road, Flixton, Urmston, Manchester, M41 8QY

**Need finance?** Thoughts of starting your own label but don't know where to start? Then contact Sorted Productions for details. 3 Mayflower Cottages, Standish, WN1 2UR or e-mail: unidance@madasafish.com

**New Italian** label group is looking for quality house, garage, techno, drum 'n' bass and any kind of electronic dance music. Please send demos and covering letter to: AWS, via Ugo Balzani 21 ,00162 Rome, Italy or see Web site for MP3s: www.awsoundz.com

**New label** seeks artists who specialise in any kind of dance music. Send demos to Groove Lab Productions, 14 St Anne's Street, Chepstow, South Wales, NP16 5HE. CD and MiniDiscs only!

**New label** wants artists with strong sounds and melodies, video game music, aphex, no fake funk and completely unique reference points. Tel 01730 266784

**New motivated** and connected label wants cutting-edge artists to sign/licence. Demos and SAE to Vortex Recordings (ref: FM), 22 Linden Avenue, Sheffield S8 0GA. All demos will be listened to. Thankyou

**Schulte Compact Phasing** – *A*, Germany's most legendary eight-stage phaseshifter from the 1970s, used by artists like Tangerine Dream, Klaus Schultze, Kraftwerk, Oskar Sala or John Lord. Unique phasing sound with psychedelic pseudo stereo-panning. Offers please. E-mail: stephen.parsick@gmx.de

**Sneak preview** of Mutate's album Rhythums Rising, available @peoplesound.com. Just type in Mutate!

**Singer urgently** wanted for 80s generic live covers project (OMD, Ultravox, Yazoo, etc), this could be a real winner, but please no more timewasters! Tel Al on 020 8942 3063 (South West London area) or e-mail: sonik@ukf.net

**Vinyl addict** seeks swag, RAC, rhythm invention, as well as all aliases. Advent and aliases also wanted. Good money paid! E-mail for a list of titles and prices and I'll pay. scary808@hotmail.com

**We are** searching for techno/ underground tracks. Send your demos to Tinnitus Tonträger, Blumhardtstrasse 11, D70794 Filderstadt, Germany or tel 00 49 172 328 9665

**Yamaha CS1x** sound sets on floppy disk. Tel Ste on 0151 287 7888

# THE Mix Welcome To Classified

To Advertise Call: Rebecca Baron on 01225 442244 or Fax: 01225 732396

## Duplication


Make it With Us...
Sound Recording TECHNOLOGY
One Stop Manufacturing
High End Mastering
Compact Discs
Digital Cassettes
Print and Reprographics
Packaging
Conversions
Cedar
APRS the professional recording association
Market Leaders
London 020 8441 [illegible] Fax 020 8960 1880
Manchester 0161 876 7673 Glasgow 0141 550 4640
Freephone 0800 0044 1 e-mail srt@brinternet.com
www.musik.co.uk
...Nobody Does it Better
VISA

CD DUPLICATION
24 HR TURNAROUND & SAMEDAY SERVICE ON STRAIGHT DUPLICATION AVAILABLE !!!!!!!!!!
96 KHZ 24 BIT
Audio & Video CDs, Data & Mixed Mode (Audio & Data) CDs
Video editing with enhanced video CDs
CD Covers / Booklets / Artwork Setup
ONE OFF CD* WHILE YOU WAIT £5.95
Digital Mastering from DAT, CD, Minidisc, Audio Tape, Vinyl, etc.
Attended Mastering £29.38 1st hr, £17.63 p/hr thereafter
ITAL SUPPLY
e-mail: italsupply@hotmail.com
ITAL SUPPLY LTD
Suite 3, 424 Seven Sisters Rd
London N4 2LX
Fax: 020 8800 7750
Manor House Exit 5
Traxdata, TC Electronics Finaliser Plus, Panasonic BV5800, Fostex D5 Data, Marantz Pro D, TLA Parametric Valve EQ, Urei Graffic EQ, Apogee PSX100 AD/DA (UV22 encoding).
100 CDs ... £193.88
50 CDs ... £105.75
10 CDs ... £35.25
Includes On-Body Printing or Labels
CALL FOR PRICES ON OTHER AMOUNTS.
Tel: 020 8880 1302

medium moose 01424 210101
the cutting edge www.mediummoose.com
fast
friendly
personal
professional
cd manufacturing
high-end mastering
digital editing
recording
music production
re-mixes
tv & film post production sound
music scoring
artwork & graphic design

10th Planet
CDR DUPLICATION
50 CDs £80
100 CDs £150
Including Onbody print and 24 hour turnaround
020 7637 9500
Clients include: EMI, Warner Brothers, Polygram & BBC

Tapethat STAFFS
Super quality CD & cassette duplications
Custom wound blanks • Label and inlay printing
Keen prices • Friendly professional service
Short run specialist • Mail order welcome
Tel 01889 883001

1000 CDs with Booklet+Inlay c.£600 (£705 inc.VAT)
High Quality CDR copies from £1.50 (£1.76)
Real Time Cassette Copying
CD/CD-ROM Mastering £60ph (£70.50)
Enhanced CDs, CD-audio, CD-ROM
Copy Masters, Compilations, Editing
Graphic design
15 years experience
Photo quality or litho printing
Large and small run specialists
Excellent quality and presentation
LOWER PRICES!
RPM
Repeat Performance Multimedia
6 Grand Union Centre
West Row
London W10 5AS
Tel. 020 8960 7222
visit us at
www.repeat-performance.co.uk

CD duplication
Web Design
dBMasters
Brochure available
T: 07041 380001 F: 0181 851 5335
E: info@dbmasters.co.uk
www.dbmasters.co.uk

Keynote CASSETTES
✓ CASSETTE DUPLICATING
✓ CUSTOM BLANK CASSETTES
✓ CDR - SHORT RUN CDS
✓ CD MASTERING
✓ COMPACT DISC PACKAGES
✓ FULL PRINT SERVICE
✓ DAT/MD/CDR SUPPLIES
CALL NOW FOR A QUOTE & FREE BROCHURE
SALES LINE FREEPHONE 0800 23 45 16
TEL: 01252 794253 FAX: 01252-792642
WEB: www.keynoteaudio.co.uk
EMAIL: sales@keynoteaudio.co.uk
1977-2000 CELEBRATING 23 YEARS
TRUST THE EXPERTS NOT YOUR LUCK

QUALITY, CHEAP & QUICK!
500 CD ALBUMS: ONLY £650
500 12" SINGLES: ONLY £599
500 7" SINGLES: ONLY £475
500 CD SINGLES: ONLY £575
500 CASS ALBUMS: ONLY £450
PRICES VAT & DAT MASTER & FILM SUPPLIED
NO HIDDEN CHARGES!
★NO EXTRA V.A.T!★
FOR MORE CHEAP PACKAGE DEALS & FREE INFO PACK CALL DAT 2 DISC
tel:020-8536 0700 fax:020-8536 0703

ELITE CD'S & CASSETTES
(CDR's copied from CD master)
10 - £35 50 - £95 CD IN BODY PRINT
25 - £60 100 - £170 & COLOUR INLAYS
• CD Duplication 500+ complete service
• Unbelievable rates! • Real Time Cassette Copies
• Nakamichi Decks • Highest quality • Blank tapes wound
0181 466 7435 www.golddust.co.uk Est 1979

HILTONGROVE MULTIMEDIA
where sound advice counts
The Hiltongrove Business Centre,
Hatherley Mews, Walthamstow, London E17 4QP
3 Mins walk from Walthamstow Central
(Victoria Underground/BR Main Line),
11 mins from M25
Tel: 020 8521 2424 Fax: 020 8521 4343
Email: info@hiltongrove.com
www.hiltongrove.com
• CD Mastering
• CD Manufacturing
• Audio Encryption
• 32 Bit Technology
• Sound Restoration
• CD ROM Multimedia
• Enhanced CDs
• Digital Video
• Cedar
• Graphic Design
• Short Run CDs
• Print

AUDIO, CD & VIDEO DUPLICATION
SELECTA SOUND
PO Box 4187, Hornchurch RM11 1GY
Tel: 01708 453424 Fax: 01708 455565

PLEASE MENTION THE Mix WHEN REPLYING TO ADVERTS

# JOSHUA

The Debut Album

## King Of The Weirdos

Available now from www.peoplesound.com priced £10.99
Includes the single Love Falls Down/King of the Weirdos
Out now only on *free* MP3 download

Check out the official JOSHUA website @ www.crazysexycool.co.uk
For 2000 tour dates and for a well funky online experience

Joshua "Croons Breathily over acoustic guitar"
*Holly Hernandez, Melody Maker*

## The Future of Music is Here

## Be Part Of The Future

www.peoplesound.com
www.crazysexycool.co.uk


## Studios


Music City

16 & 24 Track Digital Studio
Great drum room plus 2 vocal/amp booths, ADAT XTs, S3000XL & Zip, JV1080

Specialist Dance Music Studio
Creative atmosphere, release-quality results with pro-choice digital and analogue equipment

DJ Mixing Studio
Use either SL1210s or CD DJ players. Digital editing and CDs available
*Fully Licensed Bar*

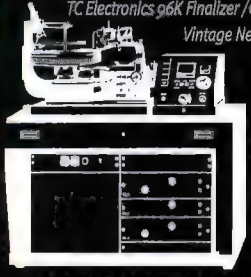
VISA
122 New Cross Road, London SE14 5BA
020 7277 9657 www.musiccity.co.uk

POP STUDIOS
Programming
Recording
Mixing
Mastering
Pop Studio, The Truman Brewery, 91 Brick Lane, London E1 6QN
Tel: 020 7375 3610
Fax: 020 7375 2377
Email: per@poprecords.net

Tel : 07980504819

Cd Mastering
Cd Manufacture
ProTools
Recording Studios
Post Production
Rehearsal Rooms
And a PUB!!

DUB PLATES
LACQUERS ACETATES SLATES
TRANSITION STUDIOS IN FOREST HILL (SOUTH LONDON) ARE NOW ABLE TO ADD DUB CUTTING TO THEIR LIST OF SERVICES AVAILABLE WHILE YOU WAIT. PRICES ARE VERY COMPETITIVE.
*Sony PCM Dats /Studer & Revox 1/4" Analogue Tape Machines*
*TC Electronics 96K Finalizer /Genelec Monitors (1032A's)*
*Vintage Neve Compressors & Limiters*



OFF STREET PARKING
MASTERCARD, VISA, VISA-ELECTRON, SWITCH & SOLO Cards accepted
APPOINTMENT ALWAYS NECESSARY
CAN'T GET TO OUR STUDIO?
WE CAN ARRANGE YOUR DUBS TO BE DELIVERED, PLEASE PHONE FOR MORE INFO.
TRANSITION STUDIOS TEL.020 8699 7888
EMAIL: transition-studios.co.uk


## Flight Cases


NEW & USED FLIGHT CASES FOR SALE & HIRE
Over 350 cases in stock, cheapest in the U.K. Buy online now at www.spider-engineering.co.uk or tel Steve/Nigel on 01827 60009 or fax 01827 67066
email info@spider-engineering.co.uk/mix

SPM Studios & Mobile
16/24 Track Digital Recording
- 3 Live Rooms, including Piano/Vocal, Guitar & Drum Room
- Yamaha Grand Piano
- Full Midi Sequencing facilities
- Lexicon Reverbs
- Digital Editing and Mastering/Re Mixing
- CDR & full CD Production, including Artwork
- CD & Cassette Duplication
- Bands, Song-Demos, Backing Tracks, Video Music, etc
- From £20 per hour, including Engineer/Producer

Tel: 0870 0614 ***
to discuss your requirements

THE MIX


## Duplication


Compact Disc Manufacture
One off CDs up to 74 mins £29.50 Inc VAT

| | | | |
|---|---|---|---|
| 500 CD Singles complete only | £763.75 | 1000 CD Singles complete only | £1086.88 |
| 500 CD Albums complete only | £869.50 | 1000 CD Albums complete only | £1175.00 |

Digital/Post Mastering
Sadie - Focusrite - GML - Neve
Lexicon - TC Electronics - MD2
20 Bit A to D - 32 bit DSP.

Tel C.R.S.
01424 444141
All prices inc VAT

Artwork Design & Layout
Drum Scanning - Typesetting
Fine art - Imagesetting
to Film & Bromide.

To advertise in The Mix
please call 01225 442244
or fax 01225 732396

# Learn to Mix with the **best**

**SAE Technology College – More equipment** than any other **Audio & Multimedia College - Neve, SSL & digital consoles** and the latest in **computer technology** - the **largest** of its kind - **practical professional education** with more **hands-on time** than any other - 27 Colleges **worldwide** with the option to move between branches - the **widest range** of courses with options to suit all requirements, from **Certificate to Degree** - established in 1976 and, quite simply, **the best!**

**Audio Courses:**
- Studio Sound Certificate • Audio Engineering Diploma
- Bachelor of Arts (Honours), Recording Arts* • Beat Mixing Workshop • DJ Certificate

**Multimedia Courses:**
- Multimedia Producer Diploma • Bachelor of Arts (Honours), Multimedia Arts*

* In exclusive association with **MIDDLESEX UNIVERSITY**

**London: Tel: +44 (0)207 609 2653** Fax: +44 (0)207 609 6944
**Glasgow: Tel: +44 (0)141 429 1551** Fax: +44 (0)141 429 1771
Email: enquiries@sae.edu.co.uk Internet: www.sae.edu

Amsterdam: +31 (0)20 622 87 60 Munich: +49 (0)89 67 81 81 Stockholm: +46 (0)8 730 61 20
Athens: +30 (0)1 321 7661 Paris: +33 (0)1 48 11 96 96 Sydney: +61 (0)2 9211 3711
Auckland: +64 (0)9 373 4712 Singapore: +65 741 1257 Vienna: +43 (0)1 330 4133

SAE TECHNOLOGY COLLEGE

---

**DIPLOMA**

**SSL G-PLUS SOUND RECORDING & MUSIC TECHNOLOGY COURSE**

CALL IMW FOR MORE DETAILS AND A FREE BROCHURE ON
**020 7253 3497**
OR LOG ON
**www.imw.co.uk**

HUGE DISCOUNTS FOR UNEMPLOYED AND WAGED STUDENTS

IMW Graduate David Newell (behind the SSL G+ console) recording engineer of the No 1 HR Sweet Like Chocolate by Shanks and Bigfoot.

---

**ALCHEMEA**
College of Audio Engineering
We offer more practical time than any other college
020-7359-4035
www.alchemea.co.uk

---

## Computer Recording

**Creative Music Systems**
**01938 PC Audio Specialists 570337**
*We will give your music the - edge the - edge*
**Call For:** Custom Audio PCs & Accessories
**All systems specially configured & tested To Suit You**

---

**LAE**

**Live Audio Courses**

LAE provides the only course that specialises in Live Audio Engineering, with a job placement scheme and apprenticeship for our graduates. The training you receive is entirely focused on the skills you need to do the job. You will learn all aspects of mixing & balancing both Front of House & Monitor systems, gaining valuable experience needed in this demanding field.

**For a Prospectus call: 020 8262 3706**
or fax: 020 8270 8667
Email: info@liveaudioengineering.freeserve.co.uk

---

## For Hire

**ADVANCED SOUNDS LTD (Hire & Sales)**
- Musical & Studio Equipment Hire
- Home Recording Packages Hire
- New & used equipment, Sales, Part/Ex
- Delivery/Collection - Nationwide

LOW RATES GOOD SERVICE
**020 8462 6261 (OR 8621)**
www.advancedsounds.co.uk

---

**ATLANTIC HIRE**
RECORDING/PA EQUIPMENT FOR HIRE
Discounts
Best Rates
**TEL: 020 8209 1384 or 020 8209 0025 (24hrs)**

---

## Artists Wanted

**Find yourself a RECORD DEAL in the Band it A&R newsletter, try it - FREE**

This valuable monthly newsletter features 24 labels, publishers, management etc. in the UK, USA and worldwide that are looking for new acts, songs or masters. Send a SAE to Band it for a FREE SAMPLE EDITION.

BANDIT (MIX), PO BOX 22, NEWPORT, ISLE OF WIGHT, PO30 1LZ
or email: info-banditnewsletter.com
Sample the information supplied by Bandit by calling
**09066 566 567**
Operated in conjunction with the I.S.A. Calls cost 60p/min at all times
Sample Feature & Info also on www.banditnewsletter.com

---

## Vocal Tuition

**'VOICE BUILDING'***
www.samwest.co.uk
Used by thousands of singers to maintain vocal fitness this 67 min recording is the UK's leading vocal exercise programme
Also on video
'The SAM WEST VOCAL WORKOUT'
Covering Breathing, Range, Resonance etc
No charges for postage in UK
Goods sent within 14 days
Cheques etc to 'Sam West Productions' 143 Bathurst Gardens, London NW10 5LH
Tel/Fax: 020 8961 0097
*CD: £10.95, VIDEO: £19.95

---

**Recording Studio Engineering Course**

[illegible] training in [illegible] recording, live recording, FX, Sampling, Midi sequencing & SMPTE etc.
Courses start [illegible] Intensive 12 week modules
[illegible] School
**020 8275 0234**
**07775 784978**

---

**The Recording Workshop**

Since 1989 SPECIALISES in 2 month HANDS-ON part-time COURSES in very small groups on latest recording & production techniques for beginners and advanced. Subjects include: MICROPHONES, EQ, EFFECTS, PROCESSORS, MULTI-TRACKING, MIXING, MIDI, SYNTHESIS, CUBASE, SAMPLING, PRODUCTION, ETC....

Concessionary rates available
32 TRACK STUDIO AVAILABLE FOR HIRE
Based in West London
For Prospectus call free: 0800 980 7453

---

**THE MIX**

Please mention The Mix when replying to adverts

## Albums

JOSHUA
The Debut Album
King Of The Weirdos
Available now from www.peoplesound.com priced £10.99
Includes the single Love Falls Down/King of the Weirdos
Out now only on free MP3 download.
Check out the official JOSHUA website at www.crazysexycool.org.uk
For 2000 tour dates and for a well funky online experience
Joshua "Croons Breathily over acoustic guitars"
Holly Hernandez, Melody Maker
The Future of Music is Here
Be Part Of The Future


## Courses

Want free online exposure for your talent?*

Then see what we can do for you.

played@the-asylum

Web: http://www.the-asylum.co.uk/played
E-Mail: played@the-asylum.co.uk
Fax: 0870 0526254

*Terms and conditions apply, see website for details. Face pulling (however talented), is excluded from this offer.


## For Sale


MULTITRACK SALES

TASCAM DA30 II (MINT) ..... £499
NEUMANN TLM103 (AS NEW) ..... £449
TL AUDIO 5021 (MINT) ..... £329
TL AUDIO 5001 (MINT) ..... £329
RODE NT2 (AS NEW) ..... £219
KORG SOUNDLINK 880 A/D ..... £299
YAMAHA SU700 (NEW) ..... £449
AKAI MPC2000 XL (NEW) ..... £749
ROLAND VS880 EX (NEW) ..... £799
EMU E4X TURBO 124MB + 1GIG ..... £1499
AKAI DR16 4GB V2.32 ..... £1499
ROLAND SRV3030 (MINT) ..... £299
DRAWMER DL231 ..... £199
AKG C414 ULS (AS NEW) ..... £399
ALESIS QUADRAVERB 2 (AS NEW) ..... £249
ROLAND JD800 ..... £499
DIGITECH MIDI VOCALIST ..... £199
POSTEX D80 (MINT) ..... £495

WANTED
ALL STUDIO & MUSIC EQUIPMENT
TEL: ASCOT (01344) 891116 or (0831) 882666

Floppy Disks Box of 10 £1.99
Consumer Audio CD74 Box of 100 @ £0.99
Accessories Bag £2.50

MINI DISCS
MD 74 min ..... from £0.99
MD 80 min ..... from £0.89
Mini Data Disc 1.4Mb ..... £8.99
MD Head Cleaner ..... £8.99
(Essential care for multitrack)
Accessories Bag ..... £2.50

DAT Tapes
D15 ..... from £2.35
D30 ..... from £2.65
D46 ..... from £3.05
D60 ..... from £3.55
D90 ..... from £3.95
D120 ..... from £4.35
DAT Head Cleaner ..... £6.95

DCC
D50 ..... £2.99
DCC Head Cleaner ..... £12.99

Short Cassettes
Ferric D10 ..... £0.45
Ferric D15 ..... £0.47
Ferric D20 ..... £0.48
Ferric D30 ..... £0.50
Ferric D60 ..... £0.55
Chrome D10 ..... £0.49
Chrome D15 ..... £0.55
Chrome D20 ..... £0.59
Chrome D30 ..... £0.65
Need TDK, Maxell etc, call NOW!

Equipment
MD Player Sony 530 ..... £149
MD Player Sony 700 ..... £249
MD Player Sony MZR55 ..... £169
MD Player Sony MZR90 ..... £235
CD-R Philips CDR770 ..... £239
CD-R Pioneer PDR509 ..... £275
DJ Equipment ..... CALL

CD-R (Consumer Audio)
CD-R 74 min ..... from £0.99!
CD-R 80 min ..... from £1.10
CD-RW 74 min ..... £1.99

CD-R (Computer Data)
Unbranded 74 min ... from £0.75
Branded 74 min ... from £0.89
Branded 74 CD-RW ..... £1.75
BASF 80 min ..... £0.99

Miscellaneous
Accessories Bag ..... £2.50
Floppy Disks (Pack of 10) .. £1.99
Zip Disk 100Mb ..... £6.49
CD Labelling Kit ..... £19.99
Labels (white) ..... £7.95
CD Disc Cleaner ..... £9.95
HHB 45 ADAT ..... £7.49
Jaz Disk - 1Gb/2Gb ..... CALL

We carry so many different brands that it is impossible to list individually, therefore please call us for best pricing and the full brand details.

Phone now 020 8813 8082 triton.media@virgin.net

HIGH QUALITY
SAMPLE CDS & MIDI FILES
Many styles covered
£20 worth of software (FREE) with first order
LEVEL ONE MUSIC
01753 572250
(at The Foyer)
http://natts.com/levelonemusic

THE MUSIC CENTRE
Established since 1986
BEST KORG PRICES IN THE UK!!!
Currently we hold a stock of warehouse and ex-demo Korg equipment ranging from keyboards to digital multitrackers at prices up to 40% off.
Looking for second goods from synths to samplers, take a look at:-
www.musiccentre.co.uk
We offer a full support service to artistes who enjoy composing music via computers to workstations from Jazz to Techno.
35-37 Tavistock Street, Bedford MK40 2RB
FREEPHONE 0800 052 3072

WANTED
FOR CASH OR EXCHANGE
STUDIO & PA EQUIPMENT
+ all musical instruments & technology
MUSIC EXCHANGE
56 Notting Hill Gate, London W11
T 020 7229 4805
OPEN 7 DAYS
LARGE SELECTION ON SALE


## Insurance

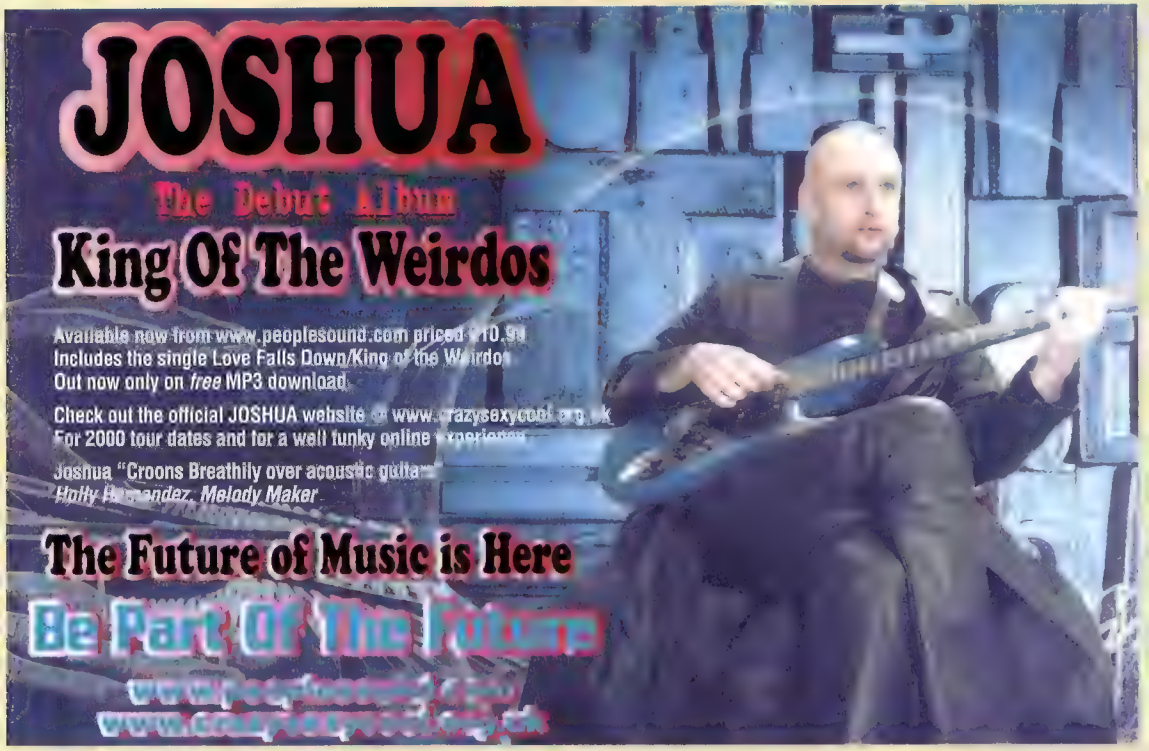

MUSICOVER
The complete insurance for all musical instruments, electronic gear, stage props, lighting, amplification etc.
Designed by a musician for musicians.
Covered at home, out and about, at gigs, in vehicles.
Golden Valley Insurance
The Olde Shoppe, Ewyas Harold, Hfds., HR2 0ES
Call 01981-240536 for free info pack, or Fax 01981-240451

To advertise in The Mix please call 01225 442244


## Wanted


TUNE INN
music store
Tel: 020 8698 4445
* NEW AND USED MUSICAL AND AUDIO EQUIPMENT FOR SALE
*FROM COMPUTERS, SEQUENCERS AND SAMPLERS TO GUITARS AND SAXOPHONES, OUR FRIENDLY AND EXPERIENCED STAFF WILL ALWAYS HAVE TIME TO GIVE YOU SOUND ADVICE - THEY'RE NOT ON COMMISSION!
* FULL SERVICE AND REPAIR FACILITIES
WE BUY FOR CASH All Unwanted Musical And Audio Equipment
EQUIPMENT HIRE
124 - 126 St. Mildreds Road, Lee, London SE12 ORG
Open: Mon - Sat 10.00am - 6.30pm www.tuneinn.co.uk

## Albums



JOSHUA
The Debut Album
King Of The Weirdos
Available now from www.peoplesound.com priced £10.99
Includes the single Love Falls Down/King of the Weirdos
Out now only on free MP3 download
Check out the official JOSHUA website @ www.crazysexycool.co.uk
For 2000 tour dates and for a wall funky online experience
Joshua "Croons Breathily over acoustic guitar"
Holly Hernandez, Melody Maker
The Future of Music is Here
Be Part Of The Future


## Studios


Music City

16 & 24 Track Digital Studio
Great drum room plus 2 vocal/amp booths, ADAT XTs, S3000XL & Zip, JV1080

Specialist Dance Music Studio
Creative atmosphere, release-quality results with pro-choice digital and analogue equipment

DJ Mixing Studio
Use either SL1210s or CD DJ players. Digital editing and CDs available
Fully Licensed Bar

122 New Cross Road, London SE14 5BA
020 7277 9657 www.musiccity.co.uk

POP STUDIO
Programming
Recording
Mixing
Mastering
Pop Studio, The Truman Brewery, 91 Brick Lane, London E1 6QN
Tel: 020 7375 3610
Fax: 020 7375 2377
Email: per@poprecords.net

DUB PLATES
LACQUERS ACETATES SLATES
TRANSITION STUDIOS IN FOREST HILL (SOUTH LONDON) ARE NOW ABLE TO ADD DUB CUTTING TO THEIR LIST OF SERVICES AVAILABLE WHILE YOU WAIT. PRICES ARE VERY COMPETITIVE.
Sony PCM Dats /Studer & Revox 1/4" Analogue Tape Machines
TC Electronics 96K Finalizer /Genelec Monitors (1032A's)
Vintage Neve Compressors & Limiters
OFF STREET PARKING
MASTERCARD, VISA, VISA-ELECTRON, SWITCH & SOLO Cards accepted
APPOINTMENT ALWAYS NECESSARY
CAN'T GET TO OUR STUDIO?
WE CAN ARRANGE YOUR DUBS TO BE DELIVERED. PLEASE PHONE FOR MORE INFO.
TRANSITION STUDIOS TEL.020 8699 7888
EMAIL: transition-studios.co.uk

Tel : 07980504819
Cd Mastering
Cd Manufacture
ProTools
Recording Studios
Post Production
Rehearsal Rooms
And a PUB!!


## Flight Cases


NEW & USED FLIGHT CASES FOR SALE & HIRE
Over 350 cases in stock, cheapest in the U.K. Buy online now at www.spider-engineering.co.uk
or tel Steve/Nigel on 01827 60009
or fax 01827 67066
email info@spider-engineering.co.uk/mix

SPM Studios & Mobile
16/24 Track Digital Recording
• 3 Live Rooms, including Piano/Vocal, Guitar & Drum Room
• Yamaha Grand Piano
• Full Midi Sequencing facilities
• Lexicon Reverbs
• Digital Editing and Mastering/Re-Mixing
• CDR & full CD Production, including Artwork
• CD & Cassette Duplication
• Bands, Song-Demos, Backing Tracks, Video Music, etc
• From £20 per hour including Engineer/Producer
Tel: 07956 [illegible]
to discuss your requirements

THE MIX


## Duplication

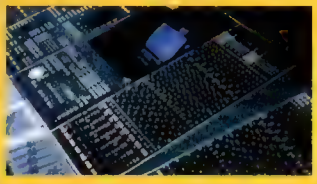

Compact Disc Manufacture
One off CDs up to 74 mins £29.50 inc VAT
500 CD Singles complete only £763.75
500 CD Albums complete only £869.50
1000 CD Singles complete only £1086.88
1000 CD Albums complete only £1175.00
Digital/Post Mastering
Sadie - Focusrite - GML - Neve
Lexicon - TC Electronics - MD2
20 Bit A to D - 32 bit DSP.
Tel G.R.S. 01424 444141
All prices inc VAT
Artwork Design & Layout
Drum Scanning - Typesetting
Fine art - Imagesetting
to Film & Bromide.



To advertise in The Mix
please call 01225 442244
or fax 01225 732396

# Learn to Mix with the best

**SAE Technology College – More equipment** than any other **Audio & Multimedia College - Neve, SSL & digital consoles** and the latest in **computer technology** - the **largest** of its kind - **practical professional education** with more **hands-on time** than any other - 27 Colleges **worldwide** with the option to move between branches - the **widest range** of courses with options to suit all requirements, from **Certificate to Degree** - established in 1976 and, quite simply, **the best!**



**Audio Courses:**
- Studio Sound Certificate • Audio Engineering Diploma
- Bachelor of Arts (Honours), Recording Arts* • Beat Mixing Workshop • DJ Certificate

**Multimedia Courses:**
- Multimedia Producer Diploma • Bachelor of Arts (Honours), Multimedia Arts*

* In exclusive association with MIDDLESEX UNIVERSITY

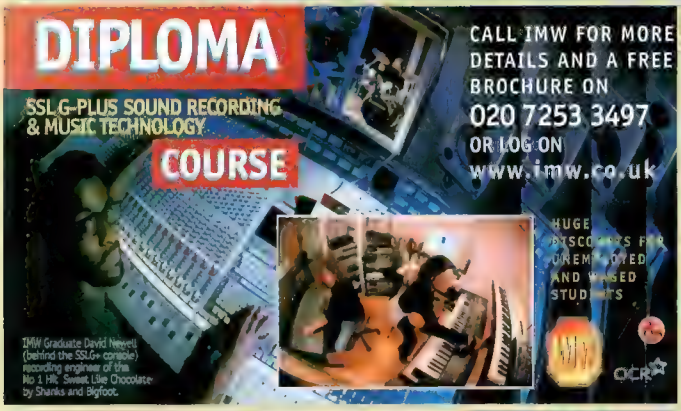
London: Tel: +44 (0)207 609 2653 Fax: +44 (0)207 609 6944
Glasgow: Tel: +44 (0)141 429 1551 Fax: +44 (0)141 429 1771
Email: enquiries@sae.design.co.uk Internet: www.sae.edu
Amsterdam: +31 (0)20 622 8770 Munich: +49 (0)89 67 51 5*
Athens: +30 (0)1 321 7661 Paris: +33 (0)1 48 11 96 96
Auckland: +64 (0)9 373 4712 Singapore: +65 741 1257
Stockholm: +46 (0)8 730 5160
Sydney: +61 (0)2 9211 3711
Vienna: +43 (0)1 330 4133

SAE TECHNOLOGY COLLEGE

## DIPLOMA

SSL G-PLUS SOUND RECORDING & MUSIC TECHNOLOGY COURSE

CALL IMW FOR MORE DETAILS AND A FREE BROCHURE ON
020 7253 3497
OR LOG ON
www.imw.co.uk


HUGE DISCOUNTS FOR UNEMPLOYED AND BASED STUDENTS
IMW Graduate David Newell (behind the SSL G+ console) recording engineer of the No 1 Hit 'Sweet Like Chocolate' by Shanks and Bigfoot.

## ALCHEMEA

College of Audio Engineering
We offer more practical hrs than any other college
0208 7359 4095
www.alchemea.co.uk

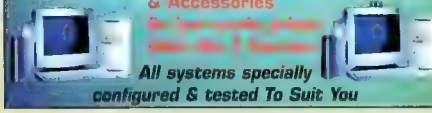
## Computer Recording

**Creative Music Systems**

01938 **PC Audio Specialists** 570337

*We will give your music the - edge the - edge*

**Call For:** Custom Audio PCs & Accessories



**All systems specially configured & tested To Suit You**

## LAE

LAE provides the only course that specialises in Live Audio Engineering, with a job placement scheme and apprenticeship for our graduates. The training you receive is entirely focused on the skills you need to do the job. You will learn all aspects of mixing & balancing both Front of House & Monitor systems, gaining valuable experience needed in this demanding field.

**Live Audio Courses**

For a Prospectus call: 020 8262 3706
or fax: 020 8270 8667
Email: info@liveaudioengineering.freeserve.co.uk

## For Hire

**ADVANCED SOUNDS LTD (Hire & Sales)**
- Musical & Studio Equipment Hire
- Home Recording Packages Hire
- New & used equipment, Sales, Part/Ex
- Delivery/Collection - Nationwide

SLOW RATES GOOD SERVICE
020 8462 6261 (OR 8621)
www.advancedsounds.co.uk

## Artists Wanted

**Find yourself a RECORD DEAL in the Band it A&R newsletter, try it - FREE**

This valuable monthly newsletter features 24 labels, publishers, management etc. in the UK, USA and worldwide that are looking for new acts, songs or masters. Send a SAE to Band it for a FREE SAMPLE EDITION.

BANDIT (MIX), PO BOX 23, NEWPORT, ISLE OF WIGHT, PO30 5EZ
or email: info@banditnewsletter.com
Sample the information supplied by Bandit by calling
09066 566 567
Operated in conjunction with the I.S.A.
Calls cost 60p/min at all times
Sample Feature & Info also on www.banditnewsletter.com

## Vocal Tuition

**'VOICE BUILDING'**
www.samwest.co.uk
Used by thousands of singers to maximum vocal fitness, this 67 mins recording is the UK's leading vocal exercise programme
*Also on video*
'The SAM WEST VOCAL WORKOUT'
Covering: Breathing, Range, Resonance etc
No charges for postage in UK
Goods sent within 1-3 days
Cheques etc to 'Sam West Productions'
143 Bathurst Gardens, London NW10 5JJ
Tel/Fax: 020 8964 0097
*CD: £10.95, VIDEO: £19.95

## Recording Studio Engineering Course

15 [illegible] 1-2-1 training modules covering hard disk and live recording, FX, sampling, Midi sequencing & SMPTE etc.
Career advice sessions included. £40 per module
Library and Music School
020 8275 0234
07775 784978

## The Recording Workshop

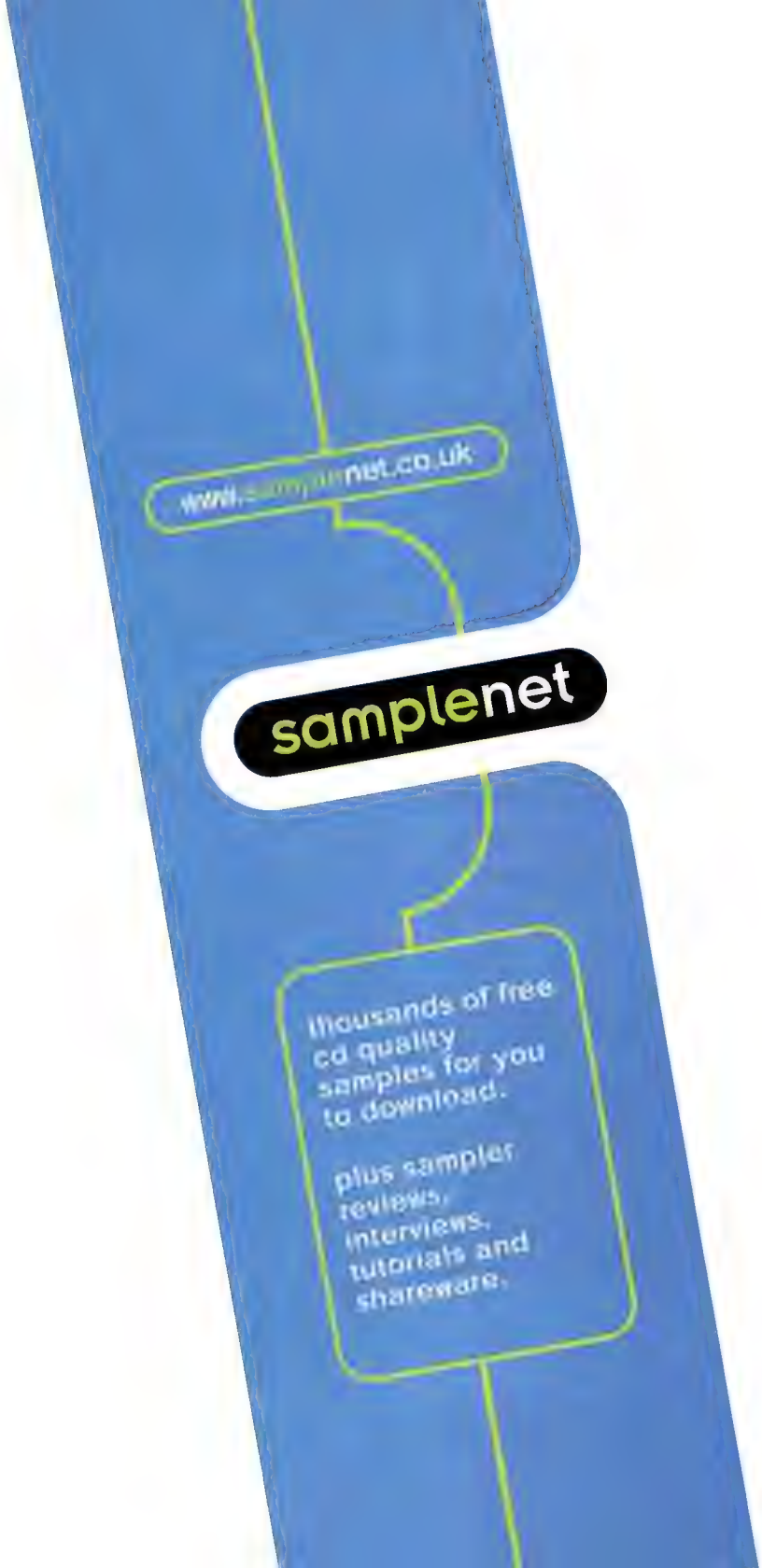
Since 1989 SPECIALISES in 2 month HANDS-ON part-time COURSES in very small groups on latest recording & production techniques for beginners and advanced. Subjects include: MICROPHONES, EQ, EFFECTS, PROCESSORS, MULTI-TRACKING, MIXING, MIDI, SYNTHESIS, CUBASE, SAMPLING, PRODUCTION, ETC....
Concessionary rates available
32 TRACK STUDIO AVAILABLE FOR HIRE
Based in West London
For Prospectus call free:
0800 980 7453
[illegible]

## ATLANTIC HIRE

RECORDING/PA EQUIPMENT FOR HIRE
Discounts
Best Rates
TEL: 020 8209 1384
or 020 8209 0025
(24hrs)

Please mention The Mix when replying to adverts

THE Mix


www.samplenet.co.uk
samplenet
thousands of free cd quality samples for you to download.
plus sampler reviews, interviews, tutorials and shareware.

# Next month in THE Mix

**Kojak** *The Mix* goes to Paris to meet the fast-rising stars of French filtered funk

**SPL Channel One** Could this be the most comprehensive recording strip available? Find out next month...

**TL Audio Fat 1** Valves for the masses: TLA's sub-£300 stereo compressor on test

**Mark Snow** We visit the Californian studio of the *X-Files* composer and producer

## June issue on sale 14th April

THE DIGITAL VILLAGE

A division of the Music Village Group

# UK's No 1 Studio Equipment Retailer Now Has 3 New Stores*

*Formerly Music Connections

## and previews the MACKIE. HDR 24/96

throughout March

Call the manager of your local store for details

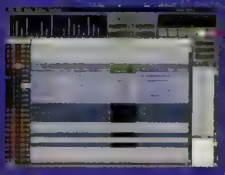
### All the editing sophistication of a top-end recording system simplified

- 24 Tracks; 192 virtual takes
- Ease of use
- 20Gb internal drive
- Complete non-destructive editing
- 999 levels of undo with history list
- Fully blown editor
- Drive bay for 2nd IDE drive
- Connect 4 together
- Reliable

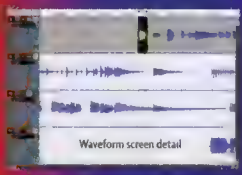
NEW

UK's No.1

### POWERFUL, INTUITIVE AUDIO EDITING SOFTWARE BUILT RIGHT INTO THE HDR24/96



The HDR24/96 provides the creative editing tools you need - so you don't have to invest in an expensive computer-based workstation system. Just plug a PC mouse, keyboard and SVGA monitor directly into the HDR24/96 rear ports.




## HDR 24/96 only £3999.99

**NEW STORE!**

**SOUTHAMPTON**

Units 2/3, Kingsgate, St. Mary's Street
S'hampton SO14 1NR **023 8023 3444**

**NEW STORE!**

**BIRMINGHAM**

Unit 2 Dakota Buildings, James St.
Birmingham B3 1SD **0121 687 4777**

**NEW STORE!**

**BRISTOL**

21 The Mall, Clifton Village, Bristol
BS8 4JG **0117 946 7700**

Near Cambridge BR Station

**CAMBRIDGE**

86 Mill Road, Cambridge, Cambs
CB1 2AS **01223 316091**

Near High Barnet Tube - Easy parking

**NORTH LONDON**

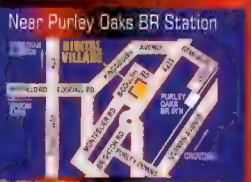
230 High Street, Barnet, Herts
EN5 5TD **020 8440 3440**

Near Chadwell Heath BR Station

**EAST LONDON**

10 High Road, Chadwell Heath, Essex
RM6 6PR **020 8597 3585**

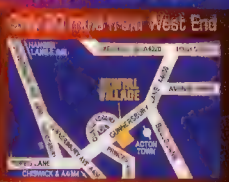
Near Purley Oaks BR Station



**SOUTH LONDON**

562 Brighton Road, South Croydon,
Surrey CR2 6AW **020 8407 8444**

Only 20 mins from West End



**WEST LONDON**

14 The Broadway, Gunnersbury Lane,
London W3 8HR **020 8992 5592**

THE DIGITAL VILLAGE
A division of the Music Village Group

# 0% FINANCE

## NOTHING TO PAY FOR 6 MONTHS

6 - 12 - 24 months or even deferred payments

# APOGEE

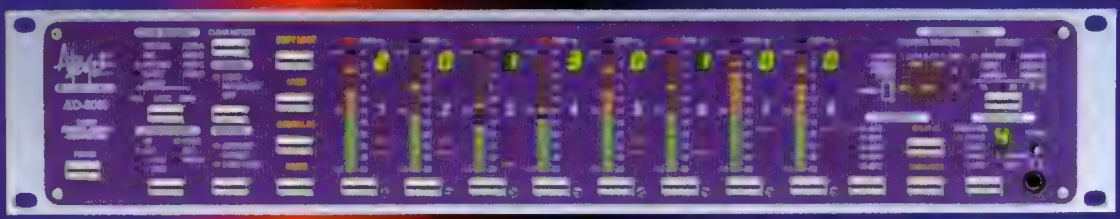
## PSX-100

- 2 Channel
- 24 Bit 96K AD/DA Conversion System
- Softlimit
- Apogee bit splitting UV22 HR

OV EXCLUSIVE PRICE...

**£1999.99**

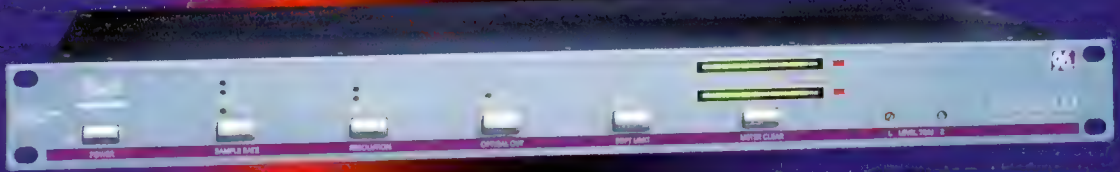
## AD-8000



- 8 Channel
- 24 Bit AD/DA Conversion System
- Softlimit
- Apogee bit splitting UV22 HR

**£4499.99**

## ROSETTA



- 24 Bit 48K & 96K AD Conversion Systems
- Softlimit
- Apogee bit splitting UV22 HR

FROM...

**£1049.99**

LEXICON STUDIO

## CORE 2

- 24 Bit
- S/PDIF
- ADAT™
- 4 In 8 Out Balanced Analogue
- Syntrillium Cool EditPro™
- dbx Type IV™

New standard in hard disk recording

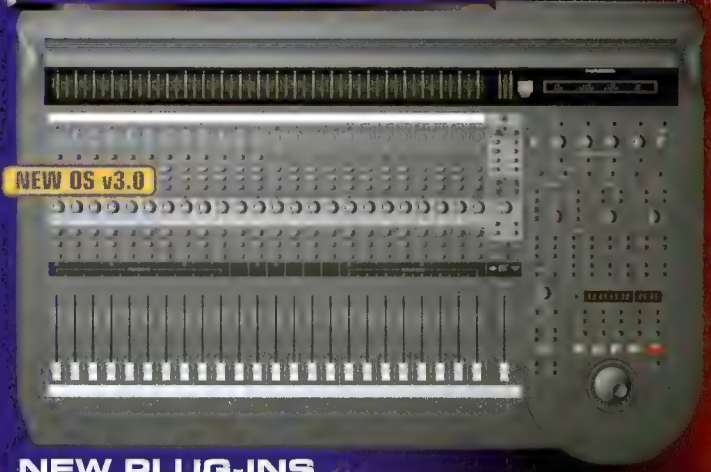
only.....

**£549.99**

| North London | East London | West London | South London |
|---|---|---|---|
| 020 8440 3440 | 020 8597 3585 | 020 8992 5592 | 020 8407 8444 |
| Fax: 020 8447 1129 | Fax: 020 8598 7236 | Fax: 020 8992 4550 | Fax: 020 8407 8438 |

Errors and omissions excepted

# MACKIE. DIGITAL 8 BUS

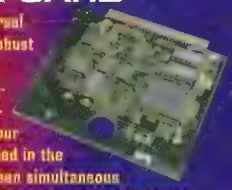



- Up to 56 channels
- 96 moving faders
- 50 dynamic channels
- Optional plug-in FX
- 4 band EQ with filters

UK's No.1 DEALER

RRP £7699 **£CALL**

## NEW UFX CARD

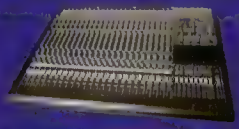


The Digital 8-Bus Universal Effects Card provides robust processing power for computation-heavy plug-ins. The UFX card is a 4-in/4-out design. Up to four UFX cards can be installed in the D8B allowing up to sixteen simultaneous single-channel effects. Comes bundled with Mackie Realtime DS3 and TC Electronics TC Reverb.

## NEW PLUG-INS...

**Waves** PARAMETRIC EQUALIZATION

24/8 ANALOGUE



8 Bus from... **£1531.00**

**DRAWMER** DYNAMICS PROCESSING

| | |
|---|---|
| MACKIE 1202VLZ Pro | £299.00 |
| CFX12 | £499.99 |
| CFX16 | £669.00 |
| CFX20 | £839.00 |
| 1402VLZ Pro | £399.00 |
| 1604VLZ Pro | Lowest Price |
| 1642VLZ Pro | £699.00 |
| SR24 | £899.00 |
| HUI | £Call for best price |
| SOUNDCRAFT Spirit 16-8-2 | £899.00 |

**t.c. electronic** REVERB/DIGITAL EFFECTS

| | |
|---|---|
| Spirit 24-8-2 | £1799.00 |
| Spirit 32-8-2 | £1995.00 |
| Spirit 328 | £2579.00 |
| Spirit F1 | from £249.00 |
| Ghost | from £1799.00 |
| Folio SX | £999.00 |
| Folio Notepad | £119.00 |
| Folio FX8/16 | from £399.00 |
| BEHRINGER MX3282A | £899.00 |
| MX2442A | £499.00 |

**ANTARES** PITCH CORRECTION

| | |
|---|---|
| MX2642A | £299.00 |
| MX1602A | £149.00 |
| MX802A | £119.00 |
| MX602A | £89.00 |
| MX8000A + Meterbridge | £999.00 |
| MX9000 | £999.00 |
| YAMAHA 03D...£1999.00 | DIV...£CALL |
| ALLEN & HEATH GS3000 | £CALL |
| TASCAM TDM4000 | £2799.00 |

## SOUNDTRACS

TOPAZ PROJECT 8

- Professional studio quality
- 24/8 inline
- 100mm long throw faders
- 6 switchable auxs

RRP was £2499

**£999.99**

## YAMAHA 02R

- Up to 44 inputs
- Digital cascade
- 24 bit ready
- Optional meterbridge
- Internal 32 bit processing

+ TC Electronic Unity Board (M2000 or Finalizer) + ADAT Board... **£4399.00**

## ALESIS STUDIO 24 MIXER

Studio Quality at an Unbelievable Price!

ADAT LX20 + Studio 24 £1399.99

SCOOP PURCHASE 43% OFF!

DV DEAL only...

**£399.99**

## SPEAKERS & HEADPHONES

**MACKIE.**

Totally accurate mastering and tracking active studio speakers.

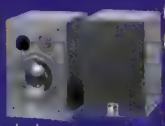
**HR824**

Perfect with the HDR24/16 and D8B

**£999.99**

**DYNAUDIO**

**BM5**



- Andy Munroe design
- Exceptional linear response

**£399.99**

**KRK**

**K ROK**

- Outstanding flat response monitors
- Totally accurate at low listening levels

WAS £499

**£349.99**

| | |
|---|---|
| NHB Circle 3 | £299.00 |
| HHB Circle 5 | £329.00 |
| KRK Rokits | £269.00 |
| Genelec 1029A | £529.00 |
| Genelec 1030A | £Lowest Price |
| Tannoy Reveals | £199.00 |
| Yamaha NS10 | £249.00 |
| Yamaha MSP5 | £CALL |
| JBL 4208 | £229.00 |
| JBL Control 1 | £99.00 |
| Alesis Monitor 1 | £CALL |
| Alesis Monitor 2 | £CALL |
| Alesis Point 7 | £CALL |
| Soundcraft Absolute Zero | £199.00 |

| | |
|---|---|
| Absolute 2 | £225.00 |
| Absolute 4P | £489.00 |
| Samson Servo 170 amp | £139.00 |
| Samson Servo 260 | £209.00 |
| Audio Technica ATH910Pro | £49.00 |
| Audio Technica ATHM40 | £69.00 |
| Beyer DT100 | £89.00 |
| Beyer DT150 | £149.00 |
| Beyer DT250 | £89.00 |
| AKG 270S | £99.00 |
| AKG 290S | £64.00 |
| AKG K141M - was £79 | £39.00 |
| AKG K55 | £24.00 |

| Southampton | Birmingham | Bristol | Cambridge |
|---|---|---|---|
| 023 8023 3444 | 0121 687 4777 | 0117 946 7700 | 01223 316091 |
| Fax: 023 8023 3266 | Fax: 0121 687 4877 | Fax: 0117 946 7800 | Fax: 01223 356857 |

Details available on request

THE DIGITAL VILLAGE
A division of the Music Village Group

0% FINANCE
NOTHING TO PAY FOR 6 MONTHS
8 - 12 - 24 months or even deferred payments

TALK TO THE EXPERTS!

Neumann

BREATHTAKING...

Neumann's fastest selling mic ever...

...and their best

£1299.99

M149

Quite simply one of the finest microphones in the world. A stunning combination of classic and state-of-the-art microphone technologies. Nine polar patterns, a seven step high pass filter, and all the latest technical innovations you'd expect. The M149 Tube is the ultimate microphone.

£3169.99

M147

In the short time that the M147 Tube has been available, it has become Neumann's fastest selling microphone. And not without good reason.

Incorporating the K49 capsule from Neumann's legendary U47 and M49 microphones, it combines a valve impedance converter and an innovative transformerless output circuit. Resulting in a stunning ultra low noise microphone that is equally at home as a superb spot mic.

To top it all, the M147 Tube is now available at a new unprecedented price. So whatever your budget, be with the best.

North London 020 8440 3440 Fax: 020 8447 1128

East London 020 8597 3585 Fax: 020 8598 7238

West London 020 8992 5592 Fax: 020 8992 4550

South London 020 8407 8444 Fax: 020 8407 8438

Errors and omissions excepted

# THE PERFECT PARTNERSHIP

## AKG acoustics C 4000B

**Large Diaphragm Professional Microphone**

The C 4000B represents the latest in AKG's long heritage of true 1", large diaphragm, premium microphones. The capsule has been carefully tuned to preserve the integrity of the source while offering mild compliments in the high frequencies. The optimised transformerless output stage insures the accuracy of low frequency and a nearly non-existent self-noise. Open, clear and natural highs coupled with smooth, accurate lows make the C 4000B an exemplary choice when employed on vocals and on a varying array of string instruments, brass and woodwinds. With all the on-board options, the C 4000B has the versatility to take on many tasks in commercial, project and personal studios as well as on a stage and in the broadcast studio.

RRP £549 **£349.99**

## dbx 386

**Dual Vacuum Tube Preamp w/Digital Out**

- Two channel tube microphone pre-amplifier
- Selectable 96KHz, 88.2KHz, 48KHz or 44.1KHz sampling rate
- 24, 20 and 16-bit wordlengths
- Selectable dither and noise shaping
- AES/EBU and S/PDIF digital outputs
- Word clock sync input and output
- Separate analogue and digital output control
- Type IV™ conversion system
- 60dB of gain and +/- 15dB of output gain
- 12 segment LED analogue/digital level meter
- Selectable mic/line switch
- 48 volt phantom power
- 20dB pad
- 75Hz low cut filter
- Phase reverse

**£499.99**

## THE PERFECT PARTNERSHIP DEAL

**AKG C 4000b + DBX 386 ONLY £799.99!!**

| Southampton | Birmingham | Bristol | Cambridge |
|---|---|---|---|
| 023 8023 3444 | 0121 687 4777 | 0117 946 7700 | 01223 316091 |
| Fax: 023 8023 3288 | Fax: 0121 687 4877 | Fax: 0117 946 7800 | Fax: 01223 353857 |

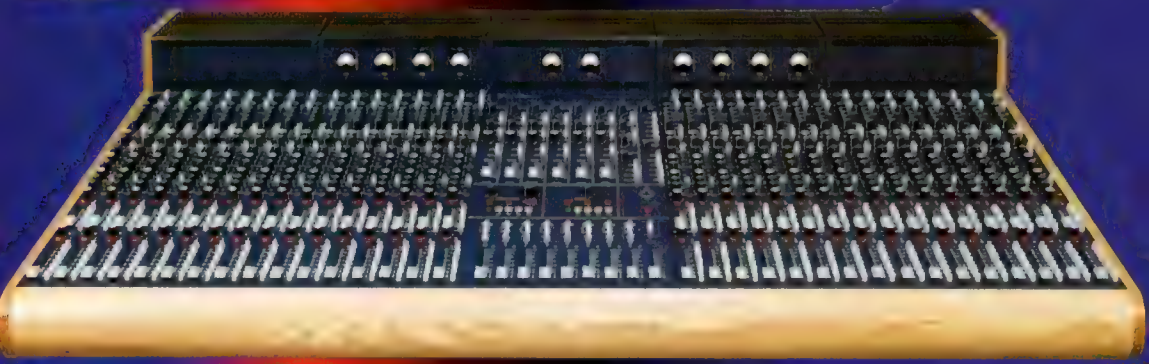
Details available on request

THE DIGITAL VILLAGE
A division of the Music Village Group

For Pro Audio Consultancy speak to:
Niki Melville-Rogers and Nick Rhodes at NORTH LONDON
Graham Harrison at SOUTH LONDON
Chris Stevens at WEST LONDON
and Adrian Harrow at EAST LONDON

# TALK TO THE EXPERTS!

## TL Audio VTC Classic Valve Console



- Fully modular in-line format
- Configurations from 16 channels to 56 channels
- Optional patchbay (internal or external), fader/mute automation and comprehensive meterbridge
- Four band EQ with fully parametric mids, one stereo and six mono aux sends, and faders on both channel and monitor signal paths
- From £16439.99

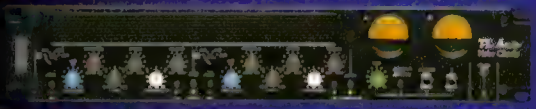
Ivory 5001 - 4 channel mic pre ..... only £399.99

Ivory 5021 - 2 channel professional valve studio compressor £399.99

Ivory 5050 - Mono valve/compressor pre-amp ..... £249.99

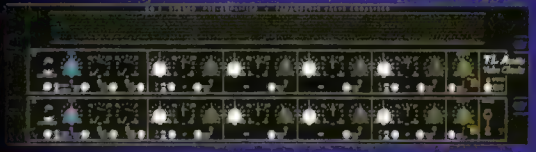
Ivory 5051 - Mono valve/compressor pre-amp expander/gate & EQ £399.99

Ivory 5013 - 4 bands of parametric EQ per channel.... £399.99



New Classic C1 - New studio standard stereo compressor... £1299.99

New Classic PA1 - Valve mic pre - New improved spec. £1169.99



EQ-2 - Stereo parametric mic pre + filters ..... £1799.99

| North London | East London | West London | South London |
|---|---|---|---|
| 020 8440 3440 | 020 8597 3585 | 020 8992 5592 | 020 8407 8444 |
| Fax: 020 8447 1129 | Fax: 020 8598 7296 | Fax: 020 8992 4550 | Fax: 020 8407 8438 |

Errors and omissions excepted

# MTA SERIES 924

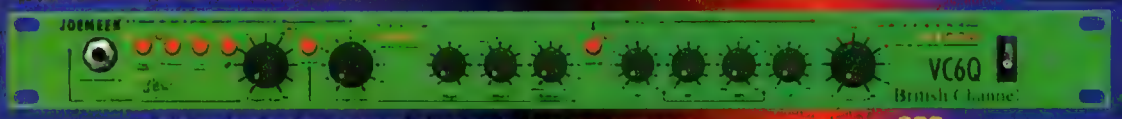
- 24 Bus
- 52 inputs on mix down (24 input)
- 4 Band sweep EQ per channel
- 2 Band shelving per montor
- 8 Aux sends
- Aux muting
- Alternate speaker monitoring
- Line up oscillator
- Talkback facility, inbuilt mic
- Full meter bridge
- Rear panel connections
- Modular construction (individual channel cards)
- Compact size (40.5 x 32.5 x 10.5in, 24 channel)
- Same mic pre/EQ combnination as on large MTA installation consoles

24 input...£8999.00
32 input...£1069.00
40 input...£12499.00

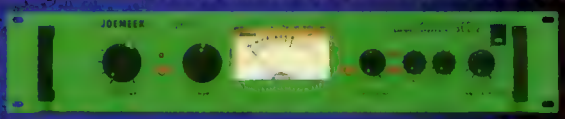
# JOEMEEK

## VC6Q

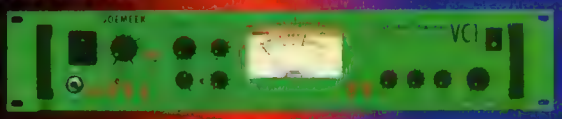
UK's No.1 DEALER



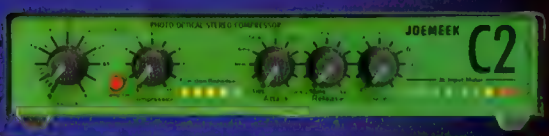

Fully professional pro-channel photo optical pre-amp compressor & Mesquabrar EQ...£299.00




**SC2.2** Studio optical stereo compressor...£449.00




**VC1** Fully professional pro-channel photo optical pre-amp compressor & enhancer. 2U...£449.00




**C2** Photo optical stereo compressor...
NEW LOW PRICE...£169.99

**HOOTERSOUND B1** Mic pre/compressor/limiter/gate. Ideal computer front end...£139.00

## JM47 TRAKPAK

Rugged Flight case fitted with:

- JOEMEEK VC3v2 Pro Channel
- JM47 Meekrophone
- Microphone shockmount cradle
- Power supply
- Mic cable
- VC3 connection cable
- Gold diaphragm capsule
- 20Hz - 20KHz

JM47 only...£249.00

ONLY £399.99

**VC3v2**
Photo optical mic-pre, compressor & enhancer only...£169.00

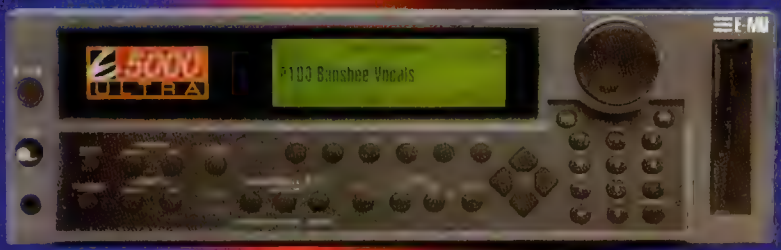
**WE REFUSE TO BE BEATEN ON SERVICE AND PRICE**

| Southampton | Birmingham | Bristol | Cambridge |
|---|---|---|---|
| 023 8023 3444 | 0121 687 4777 | 0117 946 7700 | 01223 316091 |
| Fax: 023 8023 3288 | Fax: 0121 687 4777 | Fax: 0117 946 7800 | Fax: 01223 353857 |

Details available on request

THE DIGITAL VILLAGE
A division of the Music Village Group

# E-MU




## E5000 ULTRA

**DV DEAL!!**
includes 20 free E-MU CD-ROMs
Only.... **£1099.99**

The power of the Ultra series at an affordable price • 64-Note poly • Up to 128Mb

## E6400 ULTRA

**DV DEAL!!**
includes free E-MU CD-ROMs
Only.... **£1499.99**

NEW

## ESI2000

**DV DEAL!**
Upgraded version of the ES!4000. Includes 10 free E-MU CD-ROMs
Only... **£629.99**

## PROTEUS 2000

NEW INDUSTRY STANDARD SOUND MODULE **£649.99**

## B-3

NEW

**Techno Module**
- 32Mb Sound ROM w/512 ROM & 512 User Presets
- 64 voice polyphony (expandable to 128 w/Turbo upgrade)
- SuperBEATS Mode

**£CALL**

## XTREME LEAD 1

NEW

**Perfect Hammond & Leslie Module**
- 32Mb Sound ROM w/384 ROM & 512 User Presets
- 64 voice polyphony (expandable to 128 w/Turbo upgrade)
- Rotary speaker simulation

**£CALL**

| North London | East London | West London | South London |
|---|---|---|---|
| 020 8440 3440 | 020 8597 3585 | 020 8992 5592 | 020 8407 8444 |
| Fax: 020 8447 1129 | Fax: 020 8598 7238 | Fax: 020 8992 4550 | Fax: 020 8407 8438 |

Errors and omissions excepted

# LET US CONFIGURE YOUR DREAM PC OR MAC SYSTEM

## digidesign

For advice on complete ProTools systems, interface options, and all available plug-ins, talk to:

Chris Bolitho at West London
Bryn Wildish at South London
Gavin Beckwith at North London

TOOLS v5.0

## Digi 001

The complete audio/MIDI hardware & software package from the leader in digital audio.

NEW

Upgradeable to a full ProTools system

**Pro Tools LE 5.0 Software**
- 24 Tracks of 24-bit Audio
- MIDI Sequencing
- Fully Automated Digital Mixing
- Powerful Audio & MIDI Editing
- Real-Time AudioSuite™ (RTAS) Processing

with Free DigiRack™ Plug-In FX

**24-Bit I/O Box**
- 8 Channels Analogue I/O
- 2 Channels Mic Pre-Amps
- 2 Channels S/PDIF
- 8 Channels ADAT Optical I/O
- Monitor & Headphone Outputs
- QuickPunch Footswitch
- MIDI I/O

**Single PCI Card £749.99**

For PC Systems Talk to:
Richie Wilson at North London
David Moss at South London
Luke Pierce at East London
Jez Bottom at West London
Mike Perkins at Cambridge
Neil Marchant at Birmingham
Andy Tuke at Bristol
Pat Windebank at Southampton

For Mac Systems Talk to:
Gavin Beckwith at North London
Bryn Wildish at South London
Adrian Harrow at East London
Chris Bolitho at West London
Nicholas Kidd/Dan Sanders at Cambridge
Chad Brittle/Paul Taylor at Birmingham
Paul Wyatt at Bristol
Pat Windebank at Southampton

## MAC & PC SOFTWARE & HARDWARE

| | | | | | |
|---|---|---|---|---|---|
| Yamaha DS2416 | £499.99 | Gold | £359.99 | Korg 1212 Card | £239.99 |
| AX44 | £179.99 | AX16 | £199.99 | Micrologic AV | £CALL |
| MOTU FastLane | only £69.99 | 1224 | £LOW | SW1000 | £379.99 |
| Sound Diver | £CALL | Audiowerk 8 | £CALL | Bitheadz Unity DS1 | £249.99 |
| 2408 | £849.99 | 308 | £749.99 | Unitor 8 | £499.99 |
| Digital Timepiece | £899.99 | Retro AS1 | £129.99 | Osmosis | £99.99 |
| MIDI Timepiece | £589.99 | Steinberg VST 3.7 and 4 | £289.99 | Black and White | £129.99 |
| MIDI Express | £339.99 | Wavelab V3 | £329.99 | Rebirth | £139.99 |
| Alesis Edit | £349.99 | Recycle | £199.99 | Producer Pack | £699.99 |
| Micro Express | £269.99 | Creamware Pulsar | £839.99 | TC Works Starter Pack | £139.99 |
| Pocket Express | £149.99 | Soundscape Mixstream Power Pak | £699.99 | TC Works Bundle | £299.99 |
| Opcode Studio 128X | £349.99 | Sonorus Studi/o Card | £LOW | TC Works Native Reverb | £229.99 |
| G4XTC | £379.99 | G4X | £208.99 | E-MU E-Card & APS | from £279.99 |
| TC Electronics Spark | £299.99 | Nemesys Gigasampler | from £129.99 | Aardvark 20/20 | £774.99 |
| Waldorf D-Pole | £99.99 | Gadget Labs Wave 8.24 | £469.99 | Event Darla 24 | £259.99 |
| Gina | £259.99 | Red Valve-It | £89.99 | Cakewalk Pro 7 | £79.99 |
| Pro Audio 9 | £249.99 | Layla | £599.99 | M-Audio Delta 1010 | £649.99 |
| Isis | £219.99 | Acid | £LOW | Acid Music PH-1 | £79.99 |
| Terratec EWS88MT | £399.99 | Delta 66 | £349.99 | Delta DIO | £199.99 |
| Sound Forge 4.5 | £249.99 | Midisport | £69.99 | Superdac 2496 | £249.99 |
| Emagic Platinum | £499.99 | CO2 | £45.99 | CO3 | £139.99 |

**0% FINANCE**
NOTHING TO PAY FOR 6 MONTHS

| Southampton | Birmingham | Bristol | Cambridge |
|---|---|---|---|
| 023 8023 3444 | 0121 687 4777 | 0117 946 7700 | 01223 316091 |
| Fax: 023 8023 3288 | Fax: 0121 687 4877 | Fax: 0117 946 7600 | Fax: 01223 353857 |

Details available on request

## ALESIS MASTERLINK

Revolutionary Stereo Mastering Machine
• 24-bit HD recorder • DSP mixing/fx

**£1499.99**

## HHb CDR-850

• AES/EBU Digital I/O • Professional CDR
Including 100 FREE blank CDs!

**£699.99**

## marantz CDR630

42% OFF

CDR640 £1169.99

**£399.99**

## TASCAM CD-RW700

NEW

Professional studio quality recorder/writer

RRP **£499.99**

## Roland VS1680EX

VS880EX £999.99

**£1399.99**

### VILLAGE MEGADEALS

| | |
|---|---|
| VS1680EX + BOSS VF-1 + CDR Recorder/Writer + Joemeek VC3 + Octava MK-219 | DV Exclusive £2199.99 |
| VS1680EX + Joemeek VC3 + Octava MK-219 | DV Exclusive £1599.99 |
| VS1680EX + CDR Recorder/Writer | DV Exclusive £1699.99 |
| VS880EX + Joemeek VC3 Octava MK-219 | DV Exclusive £1249.99 |

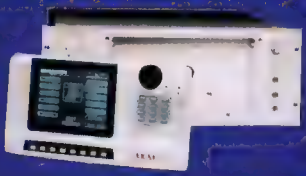
| | |
|---|---|
| Alesis ADAT LX20 | £999.99 |
| Alesis ADAT XT20 | £CALL |
| Yamaha MD8 | £CALL |
| MD4S | from £399.99 |
| Korg D8 | £CALL |
| Korg D16 | £1299.99 |
| Fostex D160 | £1599.99 |
| FD8 from | £689.99 |
| D108 | £CALL |
| Philips CDR 775 | £249.99 |
| CDR765 | £379.99 |
| Fostex D5 | £599.99 |
| Panasonic SV3800 | £899.99 |
| DAP1 | £999.99 |
| Sony MZR37 | £199.99 |
| Roland VS840EX | £CALL |
| Tascam DA20 mk2 | £429.99 |
| Tascam DA78 | £1999.99 |
| Tascam MX2424 | £2699.99 |

# KEYBOARDS, SAMPLERS, MODULES & SEQUENCERS

## Roland WE REFUSE TO BE BEATEN ON PRICE

| | | | |
|---|---|---|---|
| JV-1080 | £Lowest Price | RD-600 | £Lowest Price |
| JV-2080 | £Lowest Price | JP-8000 | £Lowest Price |
| MC-303 | £Lowest Price | JP-8080 | £Lowest Price |
| MC-505 | £Lowest Price | Boss DR-770 | £Lowest Price |
| XP-60 | £Lowest Price | BOSS DR-202 | £Lowest Price |
| SP-808 | £Lowest Price | All JV Boards | £Lowest Price |
| XP-80 | £Lowest Price | | |

## AKAI WE REFUSE TO BE BEATEN ON PRICE



| | |
|---|---|
| S5000 | £Lowest Price |
| S6000 | £1799.99 |
| S3000XL | £CALL |
| S2000 | £CALL |
| MPC2000 | £699.99 |

## YAMAHA WE REFUSE TO BE BEATEN ON PRICE

| | | | |
|---|---|---|---|
| EX-5/EX-5 Silver | £899.99 | FS1R | £LOW |
| EX-5R | £799.99 | AN1X | £399.99 |
| EX-7 | £699.99 | A3000 | £699.99 |
| CS1X | £LOW | A4000 | £899.99 |
| CS2X | £499.99 | A5000 | £1349.99 |
| CS6X | £1099.99 | | |
| CS6R | £899.99 | | |
| RM1X | £419.99 | | |
| SU700 | £LOW | | |

## KORG WE REFUSE TO BE BEATEN ON PRICE

TRITON £CALL

NX5R 30% OFF £349.99

| | | | |
|---|---|---|---|
| N1 | £949.99 | X5D | £349.99 |
| N5 | £479.99 | X5DR | £239.99 |
| Z1 | £CALL | SG Rack | £CALL |
| N264 | £629.99 | TR Rack | £439.99 |
| N364 | £688.99 | N1R | £379.99 |
| Trinity | £CALL | Electribe EA-1/ER-1 | £CALL |

| | | | |
|---|---|---|---|
| Novation Supernova | £1099.99 | | |
| Novation Nova | £849.99 | | |
| Drumstation & Basstation | £329.99 | Phat Boy | £139.99 |
| Evolution MK149 | £89.99 | Zoom Sample Trak | £249.99 |
| MK61 | £129.99 | Zoom 234 | £189.99 |
| Access Virus | £899.99 | Zoom 123 | £149.99 |


**North London** 020 8440 3440 Fax: 020 8447 1129

**East London** 020 8597 3585 Fax: 020 8598 7236

**West London** 020 8992 5592 Fax: 020 8992 4550

**South London** 020 8407 8444 Fax: 020 8407 8436


Errors and omissions excepted

# ORAM HI-DEF EQ 35 LIMITED EDITION

**Hi-Def was £3700 - VILLAGE EXCLUSIVE only... £1499.99**

## The John Oram - Father of British EQ - and Hi-Def EQ Digital Village Tour

Mon 24 April - Barnet
Thu 27 April - Acton
Wed 3 May - Southampton
Mon 8 May - Cambridge
Wed 26 April - Croydon
Mon 1 May - Chadwell Heath
Thu 4 May - Bristol
Wed 10 May - Birmingham

Phone the manager of your local store for details

**FOCUSRITE ISA430**
• Rupert Neve design • Mic pre/compressor/EQ **£2219.99**
• CLM Expounder • Manley Massive Passive • Anthony DeMaria Labs • Chiswick Reach • Eventide Orville

TC Electronic Finalizer Express.....£CALL
Finalizer 96K.....£1799.99
Fireworx.....£CALL
Tonefactory.....£369.99
Compounder.....£469.99
Aphex 104.....£149.99
Lexicon PCM 91.....£CALL, PCM 81.....£CALL
MPX1.....£CALL, MPX100.....£CALL
MPX500.....£CALL
Drawmer MX30.....£249.99
Antares Autu Tune.....£649.99
Behringer Composer Pro.....£CALL
Virtualizer Pro DSP1000P.....£CALL

Virtualizer Pro DSP1000P + Modulizer.....£179.99
Modulizer Pro DSP1200P.....£129.99
Feedback Destroyer Pro.....£129.99
Ultrapatch.....£49.99
Ultramatch.....£109.99
Digitech Quad 4.....£279.99
Talker.....£219.99
Studio Vocalist EX.....£799.99
Vocalist Access.....£499.99
Vocalist Performa.....£279.99
DBX Quantum.....£1449.99
266XL.....£145, 286.....£169.99

Alesis Midiverb 4.....£199.99
Microverb 4.....£CALL, 3630.....£109.99
Nanocompressor.....£79.99, Nanoverb.....£89.99
SPL Vitalizer.....£149.99
Line 6 POD.....£289.99
Voyager Beat Extractor.....from £199.99
Federation.....from £399.99
Purple Audio MC76.....£2299.99
Avalon VF737SP.....£1599.99
Summit MPC100A.....£2299.99
Eventide H-300 D/SX & D/SE.....from £1699.99
Oram Sonicomp.....£1699.99

**FOCUSRITE PLATINUM VOICEMASTER**
RRP £399...DV PRICE £369.99

**MEGADEAL - VOICEMASTER + OCTAVA MK-219 RRP £598...VILLAGE EXCLUSIVE - £399.99**

## OCTAVA MK-219 Professional Audio Quality Vocal and Instrument Mic

- Sensitive
- Clean natural high and mid frequencies
- Warm bass

SAVE 49%

**Sound quality worth at least 5 TIMES the price!**
RRP £299 - DIGITAL VILLAGE EXCLUSIVE.... **£149.99**

MK-219 + Boss VF-1.....£369.99
MK-219 + Joemeek VC6Q...£399.99
MK-219 + Joemeek VC3.....£269.99
MK-219 + Joemeek VC1.....£569.99
MK-219 + Hootersound B1.£239.99
MK-219 + TLA 5050.....£319.99
MK-219 + TLA 5051.....£469.99

## AKG C3000 56% OFF!!!

Superb Studio Condensor

ONLY **£129.99**

C3000 + Shockmount.....£159.99
Solid Tube.....£499.99
C414.....£CALL
D65S.....£49.99 or 3 for £99.99
C1000.....£CALL
C4000B.....£349.99

## NEUMANN TLM103

£549.99
+ Shockmount £599.99

## RØDE NT1

NT2 only £299.99
FROM **£149.99**

## BEYER TGX58

So confident are we that this mic out-performs all other dynamic mics, right up to the £250 threshold, we will give you a total refund if you are not delighted with it!

3 for £179.99 **£69.99**

MC90 - The Ultimate Recording Mic.....£259.99

| Southampton | Birmingham | Bristol | Cambridge |
|---|---|---|---|
| 023 8023 3444 | 0121 687 4777 | 0117 946 7700 | 01223 316091 |
| Fax: 023 8023 3266 | Fax: 0121 687 4877 | Fax: 0117 946 7600 | Fax: 01223 353857 |

Details available on request

THE DIGITAL VILLAGE
A division of the Music Village Group

# Hafler®

## TRM6/8

**Since Hafler introduced the TRM8 in 1997, studio engineers around the world proclaim it to be the finest near-field monitor available at any cost. Listen for yourself. Outperforming all others, the TRM8 incorporates the magic of trans-nova amplifier components and 6th order enclosure designs. Only the finest materials are used throughout, and Hafler's proprietary high frequency waveguide design provides a wide sweet spot as well as low diffraction for silky smooth highs. The new TRM6 with trans•ana circuitry now brings this same level of performance within reach of the serious engineer or musician.**

**TRM6 £1059.99**
**TRM8 £1399.99**

## TRM10S/12S

You want more? Hafler introduces TRM10s and TRM12s - active professional subwoofer systems. High performance and low distortion are a result of another Hafler innovation - the 200 watt class G trans-ana amplifier. Put this together with Hafler proprietary woofers in classic 6th order vented enclosures, and fasten your seat belt. A fourth order Linkwitz Riley crossover is adjustable from 40 to 110Hz for seamless blending. Variable input sensitivity, and 90/180/270 degree phasing give you ultimate control of woofer-to-monitor transition. Suddenly your music has depth and impact, with bass definition that you can follow in the mix. Compare the performance of TRM subwoofer systems to others costing more than twice the price. You'll choose the Hafler.

**TRM10S £589.99 TRM12S £699.99**

## P-SERIES AMPLIFIERS

The P1000 is the marriage of amplifier technology and efficiency, with a MOSFET output stage producing over 100 watts of pure Hafler power from a single rack space. A front panel headphone jack with low impedance output allows personal monitoring of your work. Convenience. You'll also find Hafler's patented trans•ana circuitry in the P1000. Whether you require broadcast monitoring, critical studio monitoring or surround sound amplification, the Hafler P1000 delivers the results you demand.

**P1000 £429.99** **P1500 £469.99**
**P3000 £589.99** **P4000 £759.99**

## 9505 AMPLIFIER

Hafler's legendary 9505 power amplifier out-performs products costing two to three times more. With our 9505 driving your mains, music suddenly sounds more natural, with less colouration and more dimension. A triple matched pair J-FET front end provides the perfect balanced input stage for Hafler's patented trans•nova and DIAMOND topologies. And with Hafler's conservative power ratings, the awesome 9505 is effortless in its performance. The finest recording studios in the world use multiple 9505s for their work and you can guess the reason.

**9505 £1115.99**

| Southampton | Birmingham | Bristol | Cambridge |
|---|---|---|---|
| 023 8023 3444 | 0121 687 4777 | 0117 946 7700 | 01223 316091 |
| Fax: 023 8023 3268 | Fax: 0121 687 4877 | Fax: 0117 946 7600 | Fax: 01223 359857 |

| North London | East London | West London | South London |
|---|---|---|---|
| 020 8440 3440 | 020 8597 3585 | 020 8992 5592 | 020 8407 8444 |
| Fax: 020 8447 1129 | Fax: 020 8598 7236 | Fax: 020 8992 4550 | Fax: 020 8407 8438 |

Errors and omissions excepted

# RELAX!

## It just *sounds* expensive

**The New MPX 500 24-bit Dual Channel Processor**
**Pure Quality from Lexicon for only £449 (incl VAT)**

SERIOUS REVERB – SUPERB VALUE

If you're looking for the pure sound of Lexicon effects and reverb, in a value for money box that is easy to use – then look no further, because the new Lexicon MPX 500 is just the thing for you.

Designed to be extremely simple to operate, the MPX 500 provides intuitive editing features that make adjusting parameters mid-session so easy that you'll wonder how you managed before.

For serious effects capability, at a very competitive price, check out the MPX 500 at your Lexicon dealer today.

MPX 1 – Versatile, dual-engine, multi-effects processor/reverb £699 (incl VAT)

MPX 100 – Powerful and affordable dual channel processor £249 (incl VAT)

RELAX, IT'S A

Lexicon

**Used on over 80% of Top 40 albums worldwide**

PURE DISTRIBUTION

For your nearest dealer call 020 7328 0660. Fax: 020 7372 6370 E-mail: sales@pure-distribution.com

Soundscape™

# mixtreme 2000

## DIGITAL POWER PAK

### All this...

**SAMPLER**
Gigasampler LE from Nemesys with Gigapiano™

**SYNTH**
SurReal from Seer Systems Synthesizer Engine

**LOOPS**
Acid Style featuring 200 Loops

**SEQUENCING**
Emagic Micro Logic AV 32 Track 24 Bit Midi/Audio Recorder

**RECORDING**
Sound Forge XP Digital Audio Editing Software

The leading companies in Digital Audio have got together to provide the most powerful Synth, Sampling, Recording, Editing, Mixing and Effects Solution ever compiled in one package.

**Ask for it by name:**

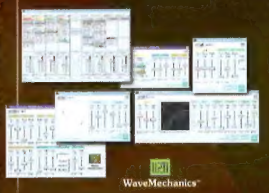
**"The mixtreme 2000 Digital PowerPAK".**

### and this...

**24 BIT MIXING**
Soundscape V2.00 24 Bit Custom Digital Mixing and Real Time Effects using on board D.S.P.

**STUDIO EFFECTS**
Audio Tool Box Real Time Studio Effects
Compressor, Limiter, Expander, Gate, Chorus, Flanger, Dithering, Digital Delay

**STUDIO REVERB**
Wave Mechanics Real Time Studio Reverb




Mixtreme Multi-Client PCI Audio Card

16 Channels 24 Bit TDIF Digital I/O

Ibox 2 Line 20 Bit Analogue I/O Interface

***for this !***

**£699.00**

**inc VAT**

*(available only from selected dealers)*

### > > > > > SOUNDSCAPE *Roadshow Dates*

- 4.04.00 - Glasgow Erskine *Forte Posthouse Glasgow*
- 5.04.00 - Edinburgh *Holiday Inn Crown Plaza*
- 6.04.00 - Newcastle *Forte Posthouse Newcastle*
- 18.04.00 - Manchester *Forte Posthouse Manchester City*
- 19.04.00 - Birmingham *Forte Posthouse Birmingham Airport*
- 26.04.00 - Kensington *Forte Posthouse Kensington*

EACH EVENT WILL BEGIN AT 19.00H

*For further details, please contact Sandra Ross on 01332 776978 or contact Soundscape Digital Technology Limited*


**Soundscape Digital Technology Limited**

*Email: sales@soundscape-digital.com* *Tel: +44 (0) 2920 540 333* *Fax: +44 (0) 2920 540 332*


www.soundscape-digital.com


© COPYRIGHT 1993 TO 2000 BY SOUNDSCAPE DIGITAL TECHNOLOGY LTD. ALL RIGHTS RESERVED. SOUNDSCAPE IS A REGISTERED TRADE MARK OF SOUNDSCAPE DIGITAL TECHNOLOGY LTD. ANY OTHER TRADE MARKS MENTIONED ARE THE PROPERTY OF THEIR RESPECTIVE OWNERS.